AD0311176A3

Service Manual

Portable CD Player

SL-SV550GT

Colour

(S).....Silver Type

Please use this manual together with the service manual for Model No. SL-SV550GK, Order No. AD0305109C3.

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⚠ WARNING

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Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. Note

- This simplified service manual is provided to indicate the differences between the original model No. SL-SV550GK-S and the subsequent model No. SL-SV550GT-S.

2. Replacement Parts List

Note:

- Important safety notice:
  Components identified by ⚠ mark have special characteristics

important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.

- All parts are supplied by MESA.

Ref.No.	Change of Parts No.		Part Name & Description	
	SL-SV550GK-S	SL-SV550GT-S		
Cabinet Parts				
20	RGN2464-H	RGN2615-H	NAME PLATE	
Accessory Parts				
A2	N0JCCE000001	RFEA439G-U	AC ADAPTOR	⚠
A3	RQT6669-K	RQT7401-K	OPERATING INSTRUCTIONS	CI
A3	RQT6766-B	-----	OPERATING INSTRUCTIONS	DI
A8	-----	RQLA0816	OPERATION STICKER	AI NO
Packaging Parts				
P2	RPK1931	RPK1930	GIFT BOX	

NOTE *1:
The operation sticker (A8) is inserted into operating instructions.

F0311KH

AD0305109C3

Service Manual

Portable CD Player

COMPACT disc DIGITAL AUDIO

SL-SV550GK

Colour

(S).....Silver Type

SPECIFICATIONS

Specifications

● CD section

CD-DA

No. of channels:	2 channels (left and right, stereo)
Frequency response:	20 to 20,000 Hz (-10 dB to 0 dB)
DA converter:	1 bit, MASH
Headphones output level:	RMS max. 8 mW+8 mW/16 Ω (adjustable)

MP3

Supported bit-rates:	32 kbps to 320 kbps (128 kbps is recommended)
Supported sampling frequency:	48 kHz/44.1 kHz/32 kHz
Maximum number of items (sum of albums and tracks):	999
Maximum album levels:	100
Pickup	
Light source:	Semiconductor laser
Wavelength:	780 nm

● RADIO section

Frequency

Radio frequency:	
FM;	87.5 – 108.0 MHz (0.05 MHz steps)
AM;	522 – 1629 kHz (9 kHz steps) 520 – 1630 kHz (10 kHz steps)
IF:	
FM;	10.7 MHz
AM;	450 kHz
Audio	
Selectivity:	
FM;	42 dB
AM;	7.4 kHz (6 dB) 21dB/9 kHz
Sensitivity:	
FM;	7.9 µV/0.5 mW output (S/N30 dB)
AM;	1000 µV/m/0.5 mW output (MAX)

● General

Operational temperature range:	0 – 40 degree
Rechargeable temperature range:	5 – 40 degree
Power supply:	
DC input (via included AC adaptor);	DC 4.5 V
AC adaptor input;	AC 220 V, 50 Hz
Power consumption:	MP3/CD-DA/RADIO
Using AC adaptor;	3.2 W/ 3.2 W/ 2.5 W
Recharging;	5 W
Playing time:	

[Approximate operating time in hours (playing MP3 at the recommended bitrate of 128 kbps, with HOLD on and S-XBS canceled, at 25 degree on a flat, stable surface)]

Battery used:	MP3/CD-DA/RADIO (FM BAND)
2 optional alkaline batteries (LR6);	Approx. 35 h/ 23 h/ 75 h
2 optional rechargeable batteries;	Approx. 14 h/ 10 h/ 30 h

- The play time may be less depending on the operating conditions.
- Play time will be considerably reduced when playing CD-RW.

Recharging time:	Approx. 4 to 5 h
Dimensions (W×H×D):	135×25.8×135 mm
Mass:	223 g (with batteries) 177 g (without batteries)

Notes: Specifications are subject to change without notice.
Mass and dimensions are approximate.

Note on CD-R and CD-RW
This unit can play CD-R and CD-RW recorded with CD-DA or MP3. Use an audio recording disc for CD-DA and finalize* it when you finish recording. The unit may not be able to play some discs due to the condition of the recording.
* A process performed after recording that enables CD-R/CD-RW players to play audio CD-R and CD-RW.

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1. Accessories

- AC adaptor
  (N0JCCE000001).....1 pc.
- Stereo earphones
  (L0BAB0000173).....1 pc.
- Wired remote control
  (N2QCBD000011).....1 pc.

2. Location of Controls and Connection to Other Equipment

3. Precaution of Laser Diode

Caution:

This product utilizes a laser diode with the unit turned on, invisible laser radiation is emitted from the pick-up lens.

Wavelength: 780 nm
Maximum output radiation power from pick-up: 100 μW/VDE
Laser radiation from the pick-up lens is safety level, but be sure the followings:

1. **Do not disassemble the optical pick-up unit, since radiation from exposed laser diode is dangerous.**
2. **Do not adjust the variable resistor on the pick-up unit. It was already adjusted.**
3. **Do not look at the focus lens using optical instruments.**
4. **Recommend not to look at pick-up lens for a long time.**

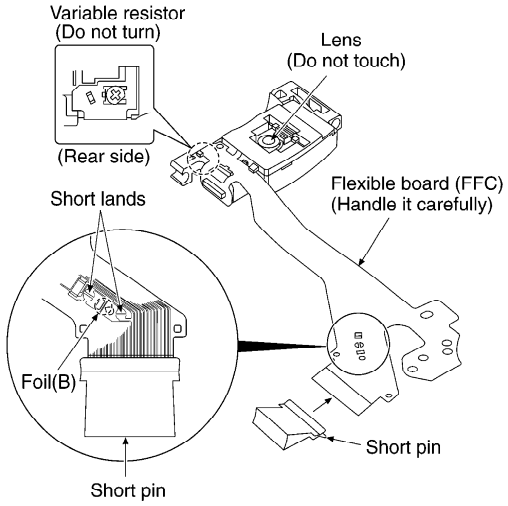
4. Handling Precautions for Traverse Deck

The laser diode in the traverse deck (optical pick-up) may break down due to potential difference caused by static electricity of clothes or human body.
So, be careful of electrostatic breakdown during repair of the traverse deck (optical pick-up).

4.1. Handling of traverse deck (optical pick-up)

1. **Do not subject the optical pick-up to static electricity as it is extremely sensitive to electrical shock.**
2. **To protect the laser diode against electrostatic breakdown, be sure that the short land of the flexible board (FFC board) should be short-circuit by solder before pulling out the FFC. Then inserting a short pin or similar object into the tipof the flexible board. / (Refer to Fig. 4-1.)**
3. **Take care not to apply excessive stress to the flexible board (FFC board).**
4. **Do not turn the variable resistor (laser power adjustment). It has already been adjusted. (Refer to Fig. 4-1.)**

Fig. 4-1.



4.2. Caution when replacing traverse deck

The new traverse deck short-circuits by the short pin, the foil (B) and short lands to protect the laser diode against electrostatic breakdown. Be sure to replace to new one following procedures.

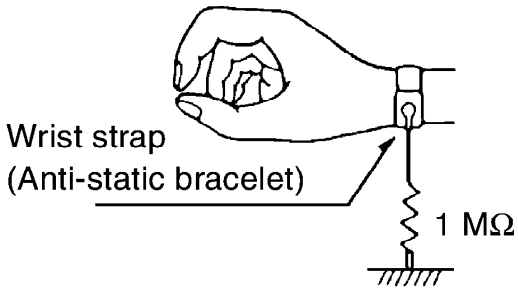
1. **Remove the short pin from the FFC, and then connect it to the connector.**
2. **Cut the foil (B). (Refer to Fig. 4-1.) (Take care not to make contact with cutting point each other.)**
3. **Unsolder the short lands. (Refer to Fig. 4-1.)**

4.3. Grounding for electrostatic breakdown prevention

4.3.1. Human body grounding

Use the anti-static wrist strap to discharge the static electricity from your body. (Refer to Fig. 4-2.)

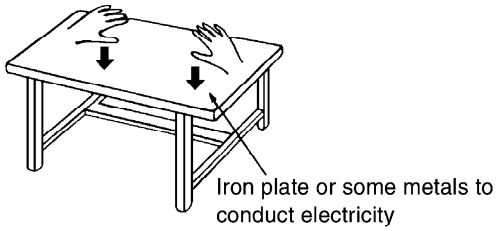
Fig. 4-2.



4.3.2. Work table grounding

Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pick -up) is placed, and ground the sheet. (Refer to Fig. 4-3.)

Fig. 4-3.



Caution:

The static electricity of your clothes will not be grounded through the wrist strap.
So take care not to let your clothes touch the traverse deck (optical pick-up).

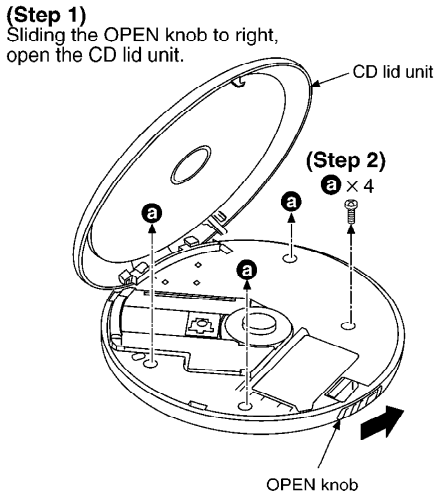
5. Operation Checks and Component Replacement / Procedures

- This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.

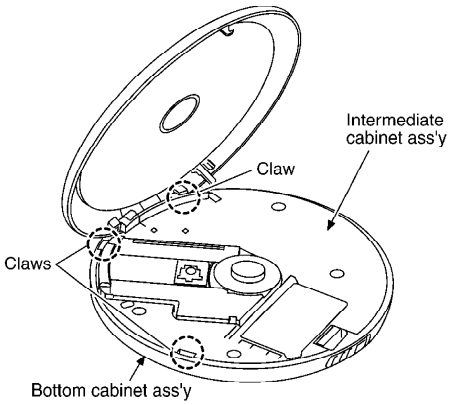
- For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.

5.1. Checking for the P.C.B.

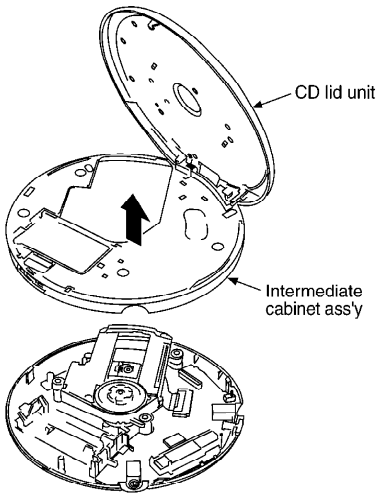
5.1.1. Checking for the P.C.B. (A side)



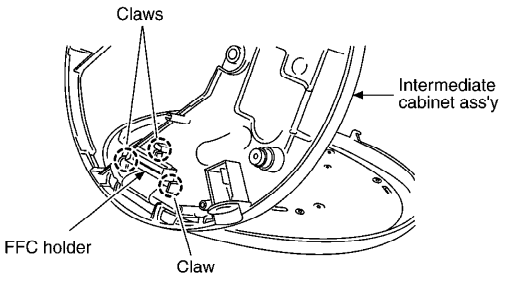
(Step 3)
Spread the clearance between the bottom cabinet ass'y and intermediate cabinet ass'y manually.

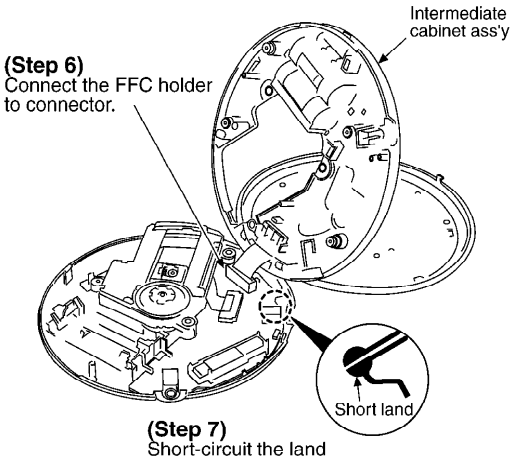


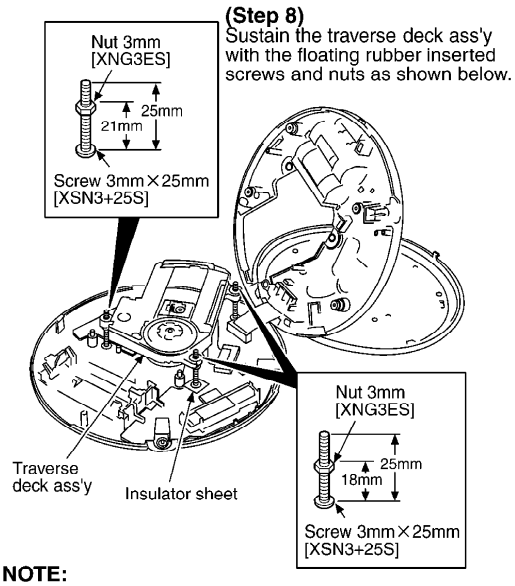
(Step 4)
Remove the intermediate cabinet ass'y and CD lid unit



(Step 5)
Release the 3 claws, and then remove the FFC holder.

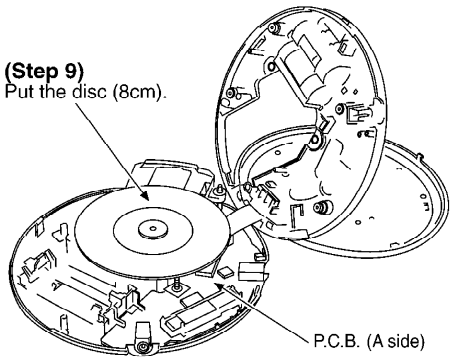






NOTE:
- The tip of screw must not protrude more than 4mm above the floating rubber.
- To keep insulation, place the insulator sheet (paper etc.) between the P.C.B. and the head of screws.

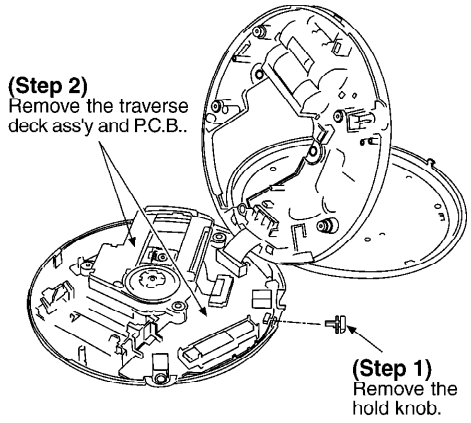
- Check the P.C.B. (A side) as shown below.



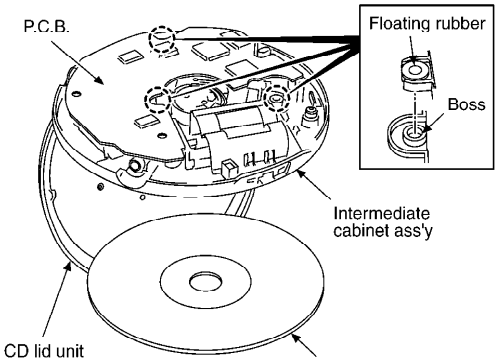
NOTE:
After checking, unsolder the short land to open circuit.

5.1.2. Checking for the P.C.B. (B side)

- Follow the (Step 1) - (Step 7) of item 5.1.1.



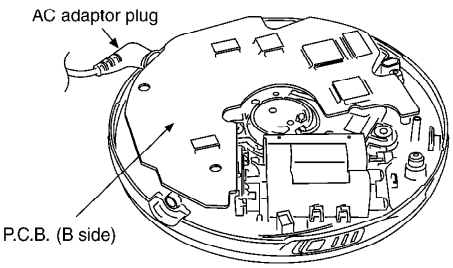
(Step 3)
Align the floating rubbers with bosses, and then locate the traverse deck ass'y and P.C.B. on the intermediate cabinet ass'y.



(Step 4)
Put the test disc, and then close the CD lid unit.

- Check the P.C.B. (B side) as shown below.

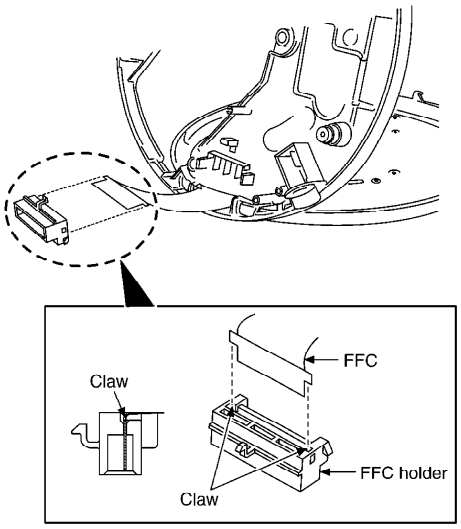
(Step 5)
Insert the AC adaptor plug into the DC IN jack, and then apply the power.



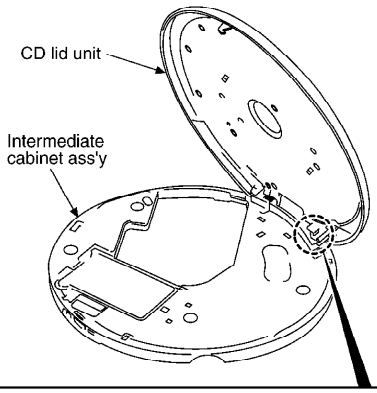
NOTE:
After checking, unsolder the short land to open circuit.

5.2. Replacement for the LCD, CD lid and operation SW

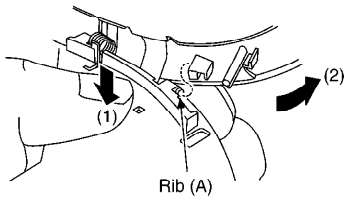
- Follow the (Step 1) - (Step 5) of item 5.1.1.



(Step 1)
Release the 2 claws, and then remove the FFC from FFC holder.

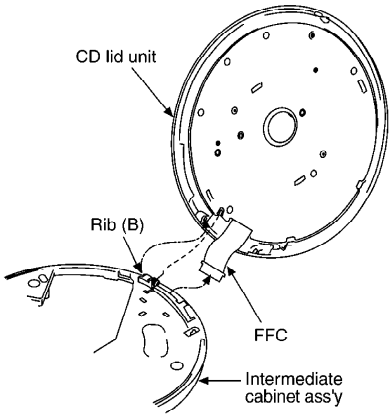


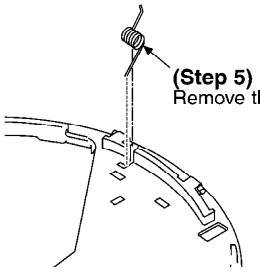
(Step 2)
Push the intermediate cabinet ass'y direction of arrow (1), and then remove the CD lid unit from rib (A).



(Step 3)
Remove the CD lid unit from rib (B).

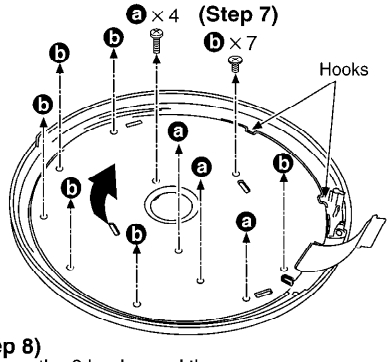
(Step 4)
Draw the FFC from the intermediate cabinet ass'y.
(Take care not to damage the FFC.)





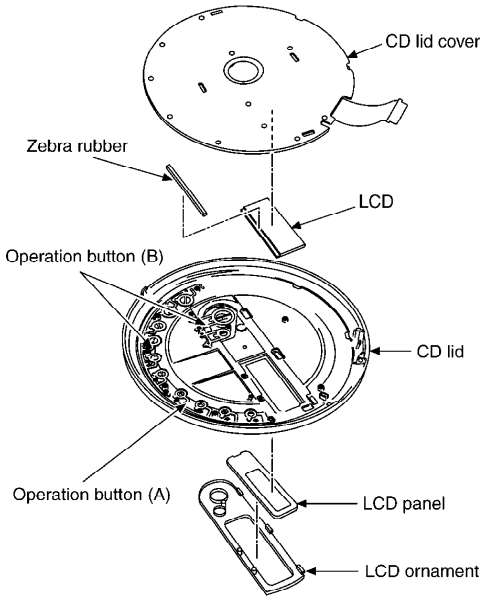
(Step 5)
Remove the open spring.

(Step 6)
ⓐ × 4 **(Step 7)**
ⓑ × 7

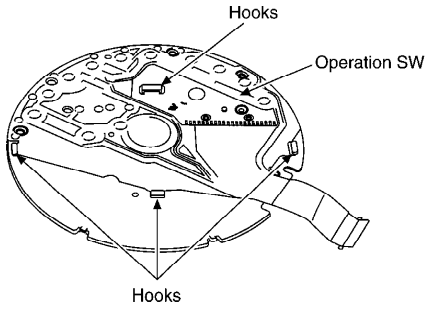


(Step 8)
Release the 2 hooks, and then remove
the CD lid cover.

(Step 9)
The parts illustrated below will be free.

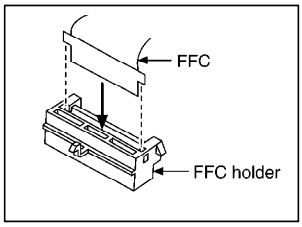


(Step 10)
Release the 4 hooks, and then remove the operation SW.

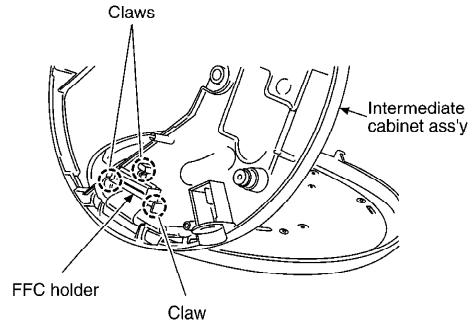


Installation of intermediate cabinet ass'y

(Step 1)
Install the FFC to FFC holder.

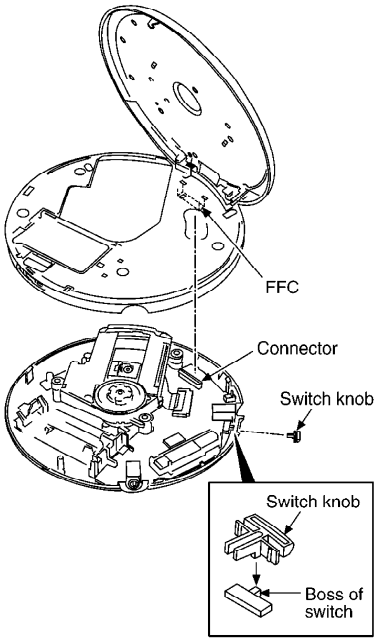


(Step 2)
Install the FFC holder to intermediate cabinet ass'y.



(Step 3)
Make sure the boss of switch is fit in the switch knob.

(Step 4)
Connect the FFC to connector (CN301).

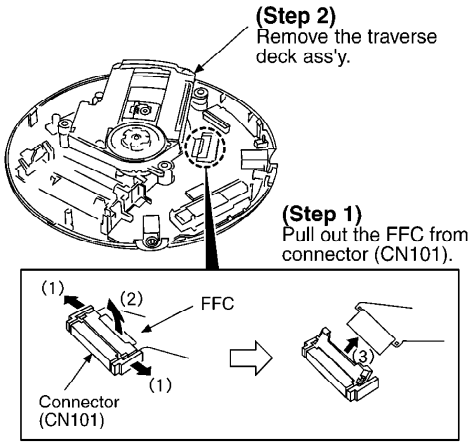


5.3. Replacement for the traverse motor

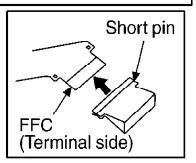
- Follow the (Step 1) - (Step 4) of item 5.1.1.

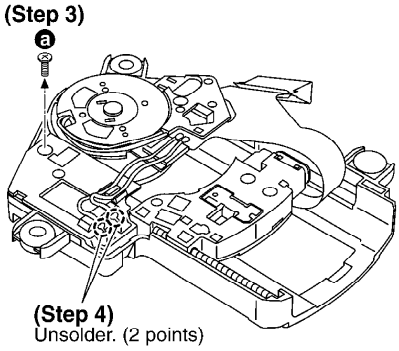
NOTE:

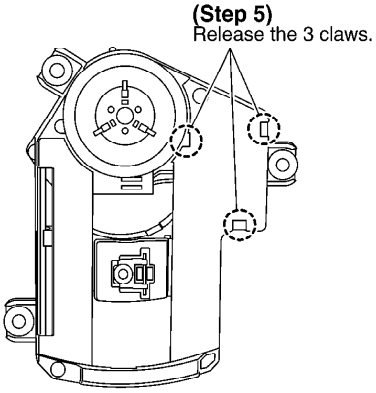
Be sure to confirm the item 4 “Handling Precautions for Traverse Deck” before removing the traverse deck ass’y.

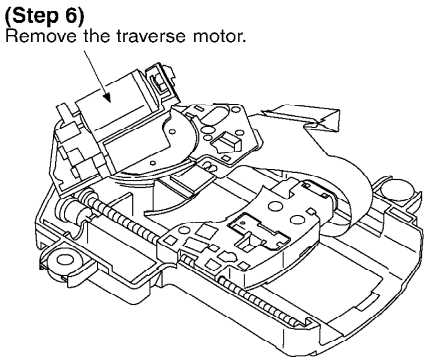


NOTE:
Insert a short pin into the traverse deck's FFC (Terminal side).
(Refer to "**Handling Precautions for Traverse Deck**".)





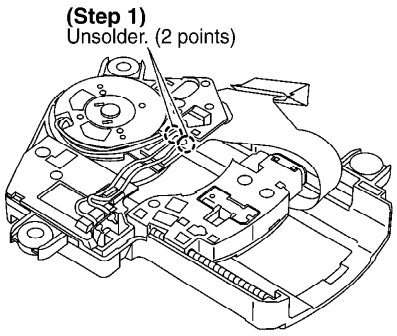


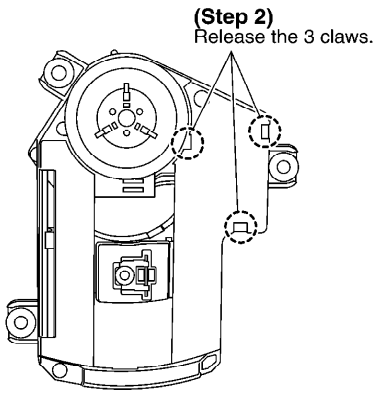


5.4. Replacement for the optical pick-up

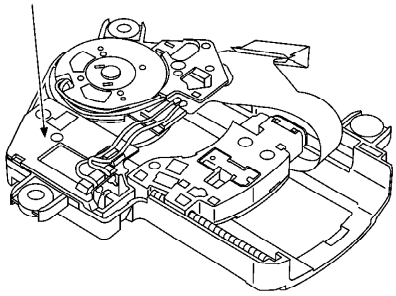
- Follow the (Step 1) - (Step 4) of item 5.1.1.

- Follow the (Step 1) - (Step 3) of item 5.3.



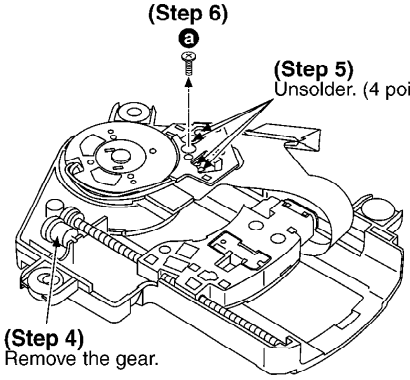


(Step 3)
Remove the holder and traverse motor.



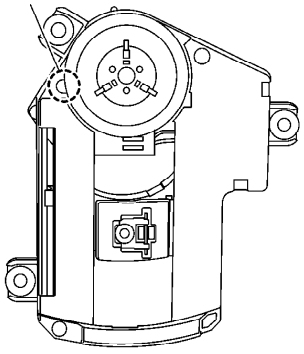
(Step 6)
ⓐ

(Step 5)
Unsolder. (4 points)

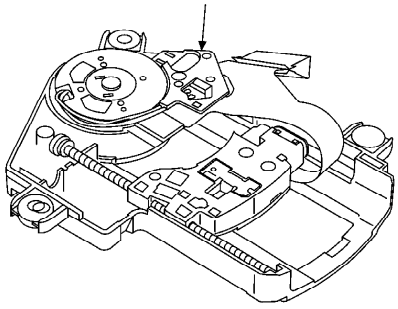


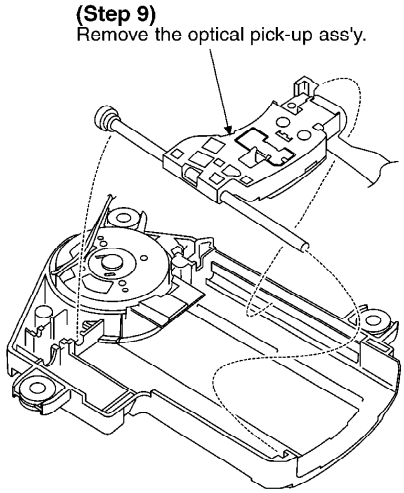
(Step 4)
Remove the gear.

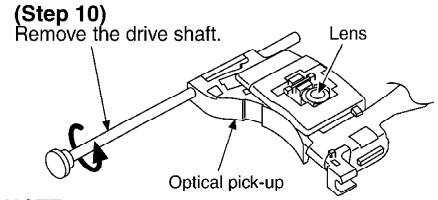
(Step 7)
Release the claw.



(Step 8)
Remove the FFC holder.





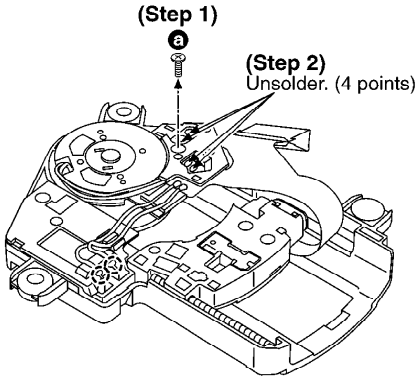


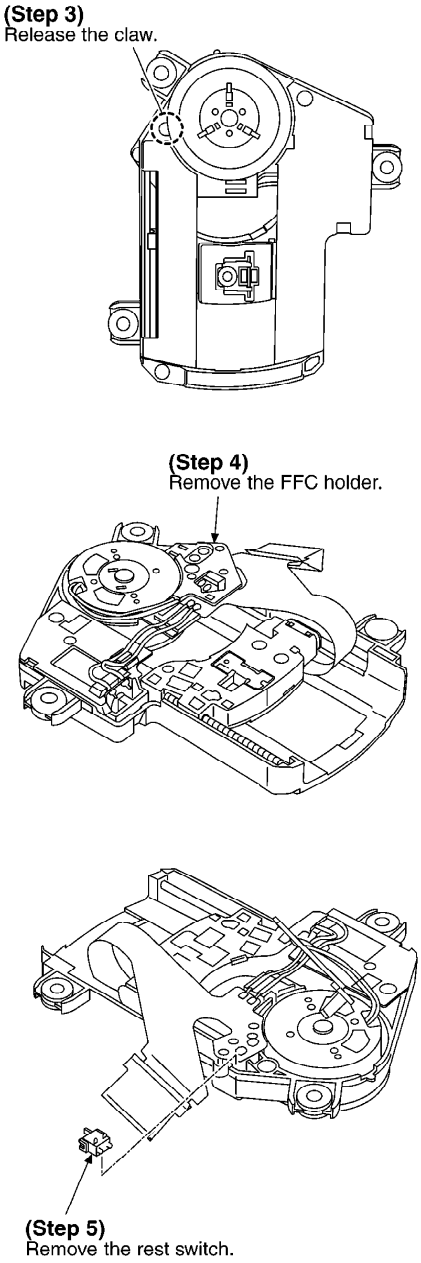
NOTE:
1. Use care to prevent damage the optical pick-up, due to the precision construction.
2. Do not apply the grease on the lens of optical pick-up.
3. Do not touch the lens of the optical pick-up.

5.5. Replacement for the rest switch

- Follow the (Step 1) - (Step 4) of item 5.1.1.

- Follow the (Step 1) , (Step 2) of item 5.3.





6. Checking the Operation Problems on the Traverse Deck (Optical Pick-up)

Make sure to follow the procedures below to check the operation problems of the traverse deck (optical pick-up) before replacing it.
Replace the traverse deck only after the problem is identified.

6.1. Check the operations described below on the traverse deck after replacing

6.1.1. Checking skip search

1. Play an ordinary musical program disc.

2. Press the skip button to check for normal skip search operation (in both the forward and reverse directions).

6.1.2. Checking manual search

1. Play an ordinary musical program disc.
2. Press the manual search button to check for smooth manual search operation at either low or high speed (in both the forward and reverse directions).

6.1.3. Checking playability

1. Play the 0.7 mm black dot and the 0.7 mm wedge on the playability test disc (SZZP1054C) and verify that no sound skip or noise occurs.
2. Play the middle tracks of the uneven test disc (SZZP1056C) and verify that no sound skip or noise occurs.

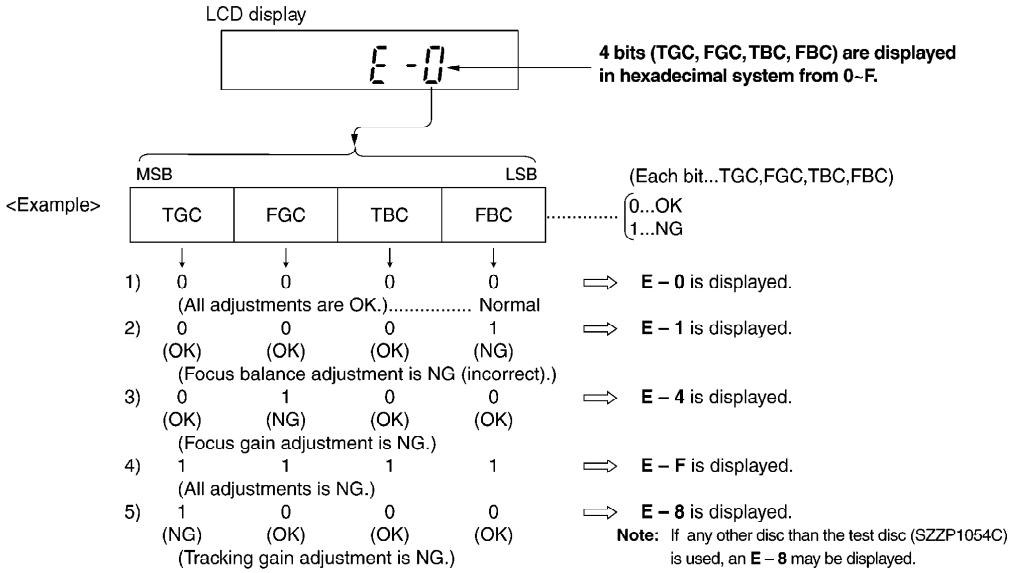
7. Automatic Adjustment Results Display Function / (Self-Check Function)

On the unit (SL-SV550), each automatic adjustment result are displayed on the LCD. This function is convenient to check or identify which automatic adjustment circuit is incorrect. The followings are the contents of the automatic adjustment result displays (Self-Check Function).

7.1. How to display automatic adjustment results

1. Set power source voltage to 4.5 V DC. (AC adaptor IN)
2. Load the test disc (SZZP1054C).
3. Press the VOL- and S-XBS buttons simultaneously and hold them, and additionally press the ▶/❚❚ (PLAY/PAUSE) button.
4. Press the ■ (STOP/OPR OFF) button once.
5. An automatic adjustment result is displayed on the LCD.

7.2. Display of automatic adjustment results (Self-Check Function)


LCD display
E -0
4 bits (TGC, FGC, TBC, FBC) are displayed in hexadecimal system from 0~F.
MSB
LSB
(Each bit...TGC,FGC,TBC,FBC)
<Example>
TGC
FGC
TBC
FBC
0...OK
1...NG
1) 0 0 0 0 ⇨ E – 0 is displayed.
(All adjustments are OK.)..... Normal
2) 0 0 0 1 ⇨ E – 1 is displayed.
(OK) (OK) (OK) (NG)
(Focus balance adjustment is NG (incorrect).)
3) 0 1 0 0 ⇨ E – 4 is displayed.
(OK) (NG) (OK) (OK)
(Focus gain adjustment is NG.)
4) 1 1 1 1 ⇨ E – F is displayed.
(All adjustments is NG.)
5) 1 0 0 0 ⇨ E – 8 is displayed.
(NG) (OK) (OK) (OK)
(Tracking gain adjustment is NG.)
Note: If any other disc than the test disc (SZZP1054C) is used, an E – 8 may be displayed.

<Example>

Follow the below steps when E-1 is displayed.

(Cause: Focus balance (FBC) is set beyond the limit.)

- Check if

1. **the waveform or voltage of the focus servo circuit is correct, and**
2. **the optical pick-up returns to the normal state by exchanging the traverse deck.**

Follow the below steps when E-4 is displayed.

(Cause: Focus gain (FGC) is set beyond the limit.)

- Check if

1. **the waveform or voltage of the focus servo circuit is correct,**
2. **the focus coil of the optical pick-up is correct (around 8 ohms), and**
3. **the optical pick-up returns to the normal state by exchanging the traverse deck.**

Follow the below steps when E-F is displayed.

(Cause: All adjustments (TGC, FGC, TBC, FBC) are set beyond the limit.)

- Check if

1. **the optical pick-up returns to the normal state by exchanging the traverse deck, and**
2. **the waveform or voltage of the servo ICs are correct.**

Note:

It is not always necessary to exchange the traverse deck when an error message is displayed. Be sure to check if the circuit is defective or not before exchanging the traverse deck.

Note:

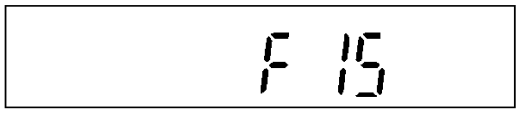
If any other disc than the test disc (SZZP1054C) is used, an error message may be displayed. This is not a malfunction.

8. Display of Self-Diagnostic Function

This unit (SL-SV550) has self-diagnostic function. It may display below-mentioned on the LCD of this unit.

- The substance of self-diagnostic display.

LCD display



(Press PLAY and STOP button. After 15 seconds, it is displayed for 2 seconds.)

In case of this display, it may be causing for abnormally movements of traverse deck, touching failure of REST detect switch and coming off or cutting off the flexible P.C.B.. It is necessary for confirmation or repair and replacement each parts.

9. Schematic Diagram Notes

- This schematic diagram may be modified at any time with the development of new technology.

Notes:

S1:

Tone selection (S-XBS) switch

S2:

Tuning, R.skip/search / (⏮ / -) switch

S3:

Sensitivity control, play mode selection (FM RECEPTCITY/ NOR, MODE) switch

S4:

Monaural/stereo (FM MODE MONO/ST) switch

S5:

Volume control switch (VOL+)

S6:

Stop/operation off (■ ,OPR OFF) switch

S7:

Tuning, F.skip/search / (▶▶| / +) switch

S8:

Memory/recall (MEMORY/RECALL) switch

S9:

Volume control switch (VOL-)

S10:

Tuning mode selection (TUNING MODE) switch

S11:

Tuner on/band select (RADIO/BAND) switch

S12:

Play/pause (▶/❚❚) switch

S201:

Laser ON/OFF switch in ON position / (It turns ON with disc holder closed.)

S202:

Rest detector switch in OFF position / (It turns ON when optical pick-up comes to innermost periphery.)

S310:

Hold (HOLD) switch in OFF position

VR1101:

FM RF adjustment VR

- Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

- The supply part number is described alone in the replacement parts list.

- Voltage and signal line

: Positive voltage line

: Main (CD, FM) signal line

: FM signal line

: CD Playback signal line

- The voltage values and waveforms are the reference voltage of this measured by the DC electronic voltmeter (high impedance) and oscilloscope on the basis of GND terminal (DC IN jack). Accordingly, there may arise some errors in the voltage valuesand waveforms depending upon the internal impedance of the tester or measuring unit.

Measurement conditions:

- AC adaptor is used for power supply.

- Set the hold switch to ON.

No mark

: CD stop mode

( )

: CD playback mode / (Test disc 1kHz, L+R, 0dB)

〈 〉

: FM mode

⌜ ⌟

: AM mode

Caution!

IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.
Cover the parts boxes made of plastics with aluminum foil.
Ground the soldering iron.

Put a conductive mat on the work table.
Do not touch the legs of IC or LSI with the fingers directly.

9.1. Cautions in Repair exchange of the Diode (D1101, D1102)

- When it is repaired, exchange the parts of D1101, D1102 together.
- The service parts of Number (KV1450TL3-4) are supplied only.

10. Schematic Diagram

11. Printed Circuit Board and Wiring Connection Diagram

12. Type Illustration of ICs, Transistors and Diodes

13. Block Diagram

14. Terminal Function of ICs

14.1. IC101(AN22003A-NF): / Servo Amplifier

Pin No.	Terminal Name	I/O	Function
1	PD	I	APC amplifier input terminal
2	LD	O	APC amplifier output terminal
3	Vcc	I	Power supply terminal
4	EQSW	I	EQ characteristic drive signal input
5	RF OUT	O	RF addition amp output
6	RF IN	I	AGC signal input
7	CAGC	-	AGC loop filter capacitance connect terminal
8	ARF	O	RF signal output
9	CEA	-	Capacitor for H.P.F. connected terminal
10	3TOUT	O	RF envelope signal output
11	DC DET	-	Capacitor for H.P.F. connected terminal
12	OFFCONT	-	Not used, open
13	BDO	O	Dropout signal output
14	OFTR	O	Off-track signal output
15	NRFDET	O	RF detection signal output
16	LDON=H	I	Laser ON signal input
17	GND	-	GND
18	PDOWN / =H	I	Headamp power OFF signal input

Pin No.	Terminal Name	I/O	Function
19	VREF	O	Reference voltage output terminal
20	TE IN	I	Tracking error amplifier input terminal
21	TE	O	Tracking error amplifier output terminal
22	FE IN	I	Focus error amplifier input terminal
23	FE	O	Focus error amplifier output terminal
24	GCTL	I	Input for CD-RW
25	FBAL	I	Focus balance signal input terminal
26	TBAL	I	Tracking balance signal input terminal
27	PDE	I	Tracking signal input terminal
28	PDF	I	Tracking signal input terminal
29	PDB	I	Focus signal input terminal
30	PDC	I	RF addition input terminal
31	PDA	I	Focus signal input terminal
32	SHARP / =H	I	Connected to Vcc

14.2. IC301(C2BBGE000658): / System Control

Pin No.	Terminal Name	I/O	Function
1	BUSY	I	Busy signal input
2	DOCTOR	I	Connected to VREF though resistor
3	VMON2	I	Battery remaining measurement signal
4	VMON	I	Rechargeable battery voltage signal input
5	KEY3	I	Not used, connected to GND
6	KEY2	I	Not used, connected to GND
7	PDOWN	O	Headamp power OFF signal output
8	OPEN	I	CD cover open detect signal input
9	CHARGE1	O	Charge control signal output
10	BUZ	-	Not used, open
11	CHARGE2	O	PVCC voltage up output

Pin No.	Terminal Name	I/O	Function
12	INT	O	Serial communication starting signal output
13	TSENSE	I	Serial communication data signal input/EEPROM data signal input/output
14	ECS	O	EEPROM communication select signal
15	TDATA	O	Serial communication data signal output
16	TCLK	I	Serial communication clock signal input
17	MLD	O	Serial command latch output
18	MCLK	O	Serial command clock output
19	MDATA	O	Serial command data output
20	STAT	I	Status signal input
21	BLKCK	I	Sub-code block clock signal input
22	WLSRCN	-	Not used, open
23	NC	-	Not used, open
24	TYPESEL	-	Not used, connected to V_{CC}
25	/RESET	I	Reset detect signal input
26	EXT-IN	-	Not used, open
27	EXT-OUT	-	
28	XOSCIN	I	System clock signal
29	XOSC / OUT	O	
30	V_{SS}	-	GND
31	REST	I	Rest detect switch signal input
32	A.SHOCK	-	Not used, open
33	HOLD	-	Not used, open
34	MACASEL	-	Not used, open
35	CHG	I	DC IN (Battery) detect signal input
36	NC	-	Not used, open
37	POWER	O	Power supply detect signal output
38	MUTE	O	Headphone amp muting signal output
39	ZAN	-	Not used, open
40	NC	-	Not used, open
41	NC	-	Not used, connected to GUP terminal
42	GUP	O	Voice gain up output

Pin No.	Terminal Name	I/O	Function
43	RW	O	Output for CD-RW
44	NC	-	Not used, open
45	X2	O	RF equalizer more than twice speed signal output
46	NC	-	Not used, open
47	CHGSEL2	I	Not used, connected to Vcc via resistor
48	RAMSEL	-	Not used, open
49	CHGSEL	I	Not used, connected to Vcc via resistor
50	PMSEL2	-	Not used, open
51	PMSEL	I	Not used, connected to Vcc via resistor
52	X3SEL	-	Not used, open
53 | 70	SEG17 | SEG0	-	Not used, open
71	Vcc	I	Power supply terminal
72	VREF	I	Reference voltage input terminal
73	AVss	-	GND
74 | 77	COM3 | COM0	-	Not used, open
78	VL3	I	Not used, connected to GND
79	VL2	I	Not used, connected to GND
80	VL1	I	Not used, connected to GND

14.3. IC501(MN6627911AC1): / Servo Processor, Digital / Signal Processor, Digital Filter& D/A Converter

Pin No.	Terminal Name	I/O	Function
1	$DV_{DD}3V$	I	Power supply terminal
2	D0	I/O	Data 0-1 input/output terminal
3	D1		
4	NWE	O	Write enable output terminal
5	NRAS	O	RAS control signal output terminal
6	D2	I/O	Data 2-3 input/output terminal
7	D3		
8	NCAS0	O	CAS control 0 signal output terminal
9	NCAS1	O	CAS control 1 signal output terminal
10 | 14	A8 | A4	O	Addresses 8-4 output terminal
15	A9	O	Address 9 output terminal
16 | 19	A0 | A3	O	Addresses 0-3 output terminal
20	$V_{SS}2$	-	GND
21	$DV_{DD}2$	I	Power supply terminal
22	SPOUT	O	Spindle motor drive output terminal
23	TRV+	O	Traverse motor drive (+) output terminal
24	TRV-	O	Traverse motor drive (-) output terminal
25	TR+	O	Tracking coil drive (+) output terminal
26	TR-	O	Tracking coil drive (-) output terminal
27	FO+	O	Focus coil drive (+) output terminal
28	FO-	O	Focus coil drive (-) output terminal
29	$IOV_{DD}1$	I	Power supply terminal
30	TBAL	O	Tracking balance adjustment signal output
31	FBAL	O	Focus balance adjustment signal output
32	FE	I	Focus error signal input terminal

Pin No.	Terminal Name	I/O	Function
33	TE	I	Tracking error signal input terminal
34	RFENV	I	RF envelope signal input terminal
35	OFT	I	Off-track signal input terminal
36	NRFDET	I	RF detection signal input terminal
37	BDO	I	Dropout signal input terminal
38	LDON	O	Laser ON signal output terminal (H: ON)
39	ARF	I	RF signal input terminal
40	IREF	I	Reference current input terminal
41	AD PV_{CC}	I	A/D reference voltage input terminal
42	DSLF	O	Loop filter output terminal for DSL
43	DRF/ / RFSW	O	Not used, connected to GND
44	PLLF	O	Not used, connected to GND
45	VCOF/ / PLLFO	O	Not used, connected to GND via capacitor
46	$AV_{DD}2$	I	Power supply terminal
47	$AV_{SS}2$	-	GND
48	OUTL	O	L ch audio signal output terminal
49	$AV_{SS}1$	-	GND
50	OUTR	O	R ch audio signal output terminal
51	$AV_{DD}1$	I	Power supply terminal
52	$DV_{SS}3$	-	Not used, connected to GND
53	TMOD1/ / $DV_{DD}3$	I	Power supply terminal
54	TMOD2	-	Not used, connected to GND
55	FLAGO	-	Not used, open
56	FCLK	-	Not used, open
57	EXT0	-	Not used, open
58	EXT1	-	Not used, open
59	$IOV_{DD}2$	I	Power supply terminal
60	TX	-	Not used, open
61	MCLK	I	Serial command clock input
62	MDATA	I	Serial command data input
63	MLD	I	Serial command latch input
64	BLKCK	O	Sub-code block clock signal output

Pin No.	Terminal Name	I/O	Function
65	PWMSEL	-	Connected to GND
66	SMCK	O	System clock signal output
67	DMUTE	-	Connected to GND
68	STAT	O	Status signal output terminal
69	NRST	I	Reset signal input terminal
70	SPPOL	O	Spindle motor drive signal output terminal
71	PMCK	O	Clock signal output
72	DQSW/ / NCLDCK	-	Not used, open
73	SUBC	-	Not used, open
74	SBCK	-	Not used, open
75	NTEST	I	Test terminal (Connected to power supply)
76	X2	O	Crystal oscillator connected (F= 16.9 MHz)
77	X1	I	
78	$DV_{SS}1$	-	GND
79	$DV_{DD}1$	I	Power supply terminal
80	EXT2	-	Not used, open

14.4. IC1301(C2FBEB000002): / System Control/LCD Drive

Pin No.	Terminal Name	I/O	Function
1 | 4	COM0 | COM3	O	LCD common signal output
5 | 22	S0 | S17	O	LCD segment signal output
23	RADIO / KEY	I	Radio key signal input
24	CDPLAY / KEY	I	Play key signal input
25	SELECT2	I	Not used, connected to GND via resistor
26	TCS	O	EEPROM chip select signal output
27	V_{DD}	I	Power supply terminal
28	BUZ	O	Beep control signal output
29	CITY	O	City/normal select signal output
30	MONO	O	Forced monaural signal output

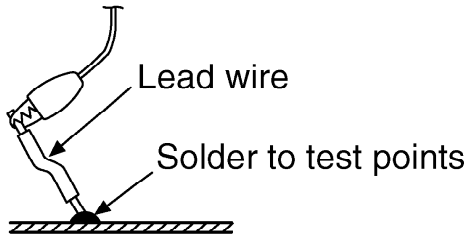
Pin No.	Terminal Name	I/O	Function
31	DDON	O	Power supply for varicap ON output
32	TMUTE	O	Mute ON signal output
33	NC	-	Not used, open
34	TUNED	I	Tuned condition signal input
35	INT	I	Serial communication starting signal input
36	SELECT1	I	Area select signal input
37	GND4	-	GND
38	OSC IN	I	FM/AM OSC signal input
39	V_{DD}	I	Power supply terminal
40	DO	O	A phase comparator signal output
41	VREG	-	Not used, connected to GND via capacitor
42	BUSY	O	Busy signal output for IC301/ data signal output for IC1500
43	TDATA	I	Serial communication data signal input
44	SO	O	Serial communication data signal output
45	TCLK	O	Serial communication clock signal output
46	6KEY	I	Remote control signal input
47	KEY1	I	Operation key signal input
48	KEY2	I	Operation key signal input
49	EMPTY	I	Battery remaining detect signal input
50	AM L	O	FM/AM select signal output
51	VR SCK2	O	Clock signal output for IC1500
52	ACDET	I	Power failure detect signal input
53	START	O	Power ON signal output
54	RESET	I	Reset signal input
55	XOUT	O	Oscillator connected terminal (F =75 kHz)
56	XIN	I	
57	GND5	-	GND
58	VDB	-	Connected to GND via capacitor
59	C1	-	Connected to C2 via capacitor
60	C2	-	Connected to C1 via capacitor
61	V_{EE}	-	Connected to GND via capacitor
62	C3	-	Not used, open
63	C4	-	Not used, open
64	VLCD	-	Connected to GND

15. Measurements and Adjustments

15.1. Tuner section

Connect lead wire for test points FM IN and FM GND. / Refer to Fig. 15-1.
(Refer to "Printed Circuit Board and Wiring Connection Diagram" about FM IN and FM GND.)

Fig. 15-1.



15.1.1. Measurement condition

1. Set volume control to maximum.
2. Release the hold state.
3. Set power source voltage to 4.5V DC. (AC adaptor IN)

15.1.2. Control positions and equipment used

1. Signal generator (FM/AM)
2. Oscilloscope
3. Headphones jig

15.1.3. FM RF adjustment

1. Connect the FM signal generator to FM IN(+) and FM GND(-).
2. Connect the oscilloscope to headphones jack. / Refer to Fig. 15-2.
3. Set the unit to FM mode.
4. Set FM-SG to 90 MHz.
5. Receive 90 MHz in the unit.
6. Adjust VR1101 for maximum output. Refer to Fig. 15-3.

15.1.4. AM RF adjustment

1. Fashion a loop of several turns of wire and radiate a signal into the loop antenna of receiver.
2. Connect the oscilloscope to headphones jack. / Refer to Fig. 15-2.
3. Set the unit to AM mode.

4. Set AM-SG to 594 kHz.

5. Receive 594 kHz in the unit.

6. Adjust L1202 for maximum output. Refer to Fig. 15-3.

Fig. 15-2.

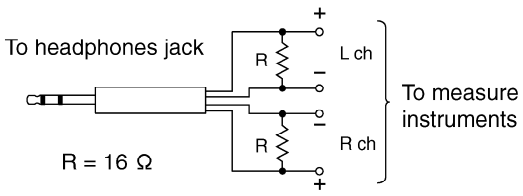
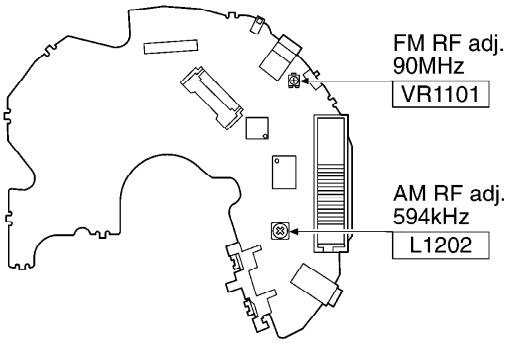


Fig. 15-3.



16. Replacement Parts List

Notes:

- Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufactures specified parts shown in the parts list.

- The marking [RTL] indicates that retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

- All parts are supplied by SPC.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	RAE0240Z-M	TRAVERSE DECK ASS'Y	1	⚠
1-1	RMG0605-K1	FLOATING RUBBER	3	
1-2	RAF0240A	OPTICAL PICK-UP	1	⚠
1-3	RDG0554	GEAR 1	1	
1-4	RDG0555	GEAR 2	1	
1-5	RMQ1125-1	MOTOR HOLDER	1	
1-6	RMS0782	SHAFT	1	
1-7	XQN17+BG45	SCREW	1	
1-8	RXQ0971-3	MOTOR ASS'Y	1	
2	RGV0317-H1	KNOB,HOLD	1	
3	RJC93038-3	BATTERY TERMINAL	1	
4	RKS0376-A	BOTTOM CABINET	1	
5	XTN17+6GFZ	SCREW	4	
6	RMB0742-2	SPRING	1	
7	RMR1514-K	HOLDER	1	
8	L5AAAEB00046	LCD(LCD1)	1	
9	RGD0098-S	CD LID	1	
10	RGK1642-S	LCD ORNAMENT	1	
11	RGP1007-X	LCD PANEL	1	
12	RGU2198-S	OPEN,TONE ETC	1	
13	RGU2199-S	BUTTON,PLAY/PAUSE / ETC	1	
14	RHQ0088-S	SCREW	7	
15	RSQ0094	ZEBRA	1	
16	XQN14+BG3FC	SCREW	4	
17	K0RE01200005	SW,OPERATION(S1-12)	1	
18	RMR1525-H1	LCD COVER	1	
19	RGV0318-H1	KNOB,OPEN	1	
20	RGN2464-H	NAME PLATE	1	
21	RHQ0088-K	SCREW	3	
22	RKK0171-A	BATTERY LID	1	
23	RKM0482A-A	MIDDLE CABINET	1	
24	RMA1648-2	SHIELD PLATE	1	
25	RMR1412-K1	LOCK PLATE	1	
26	RMC0537	SPRING	1	
27	RQLS0244	LASER LABEL	1	
A1	L0BAB0000173	STEREO EARPHONES	1	
A2	N0JCCE000001	AC ADAPTOR	1	⚠
A3	RQT6669-K	OPERATING / INSTRUCTIONS	1	CHINESE
A3	RQT6766-B	OPERATING / INSTRUCTIONS	1	ENGLISH
A4	N2QCBD000011	WIRED REMOTE / CONTROL	1	
C1,C2	ECJ1VB1C104K	16V 0.1U	2	
C3-C6	ECUVNH103KBV	50V 0.01U	4	F1H1H103A748
C7	ECJ1VB1C104K	16V 0.1U	1	
C9	F1H1A105A028	10V 1U	1	
C10	ECJ1XC1H121J	50V 120P	1	
C11	F1H1A105A028	10V 1U	1	
C12	RCST1AY475RE	10V 4.7U	1	F3F1A475A001
C13	F3H1A476A001	10V 47U	1	
C14	RCE0JKA221IG	6.3V 220U	1	F2A0J2210012
C15	ECUVNA105ZFV	10V 1U	1	F1H1A105A030

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C16	F1H1A105A028	10V 1U	1	
C17	ECUVNA105ZFV	10V 1U	1	F1H1A105A030
C19	F3F0J226A001	6.3V 22U	1	
C20	F1H1A105A028	10V 1U	1	
C21	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C22	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C24	ECUV1H391KBV	50V 390P	1	ECJ1VB1H391K
C27	F2A0J102A130	6.3V 1000U	1	
C33	ECJ1VB1H102K	50V 1000P	1	
C37	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C39	ECJ1VB1C104K	16V 0.1U	1	
C43	ECJ1VB1C104K	16V 0.1U	1	
C101,02	ECJ1VB1C104K	16V 0.1U	2	
C103	ECJ1VB1E223K	25V 0.022U	1	
C104,05	F1H1A105A028	10V 1U	2	
C106	ECJ1VB1C104K	16V 0.1U	1	
C107	ECJ1VC1H100C	50V 10P	1	
C111	ECJ1VB1E223K	25V 0.022U	1	
C112	ECJ1VB1H122K	50V 1200P	1	
C113	ECUVNA105ZFV	10V 1U	1	F1H1A105A030
C114	F1H1A105A028	10V 1U	1	
C116,17	ECJ1VB1E223K	25V 0.022U	2	
C120	ECJ1VB1H332K	50V 3300P	1	
C121	ECJ1VB1H561K	50V 560P	1	
C201	F3F0J4760003	6.3V 47U	1	
C220	F1H1A105A028	10V 1U	1	
C301	ECUVNA105ZFV	10V 1U	1	F1H1A105A030
C302	F1H1A105A028	10V 1U	1	
C321	ECUVNA105ZFV	10V 1U	1	F1H1A105A030
C501	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C502	ECEA0JKS101	6.3V 100U	1	
C503	ECUV1H391KBV	50V 390P	1	ECJ1VB1H391K
C504	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C505	ECJ1VB1H153K	50V 0.015U	1	
C507	F3G0G1070001	4V 100U	1	
C509,10	ECJ1VB1C104K	16V 0.1U	2	
C511	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C514	ECJ1VB1H102K	50V 1000P	1	
C515	F1H1A105A028	10V 1U	1	
C519	F1H1A105A028	10V 1U	1	
C524	F1H1A105A028	10V 1U	1	
C526	F1H1A105A028	10V 1U	1	
C530	ECJ1VB1C104K	16V 0.1U	1	
C603,04	ECJ1VB1H272K	50V 2700P	2	
C610	F3F0J4760003	6.3V 47U	1	
C702,03	F1H1A105A028	10V 1U	2	
C705,06	ECA0GAD221XI	4V 220U	2	
C711,12	ECUVNA105ZFV	10V 1U	2	F1H1A105A030
C720,21	ECJ1VB1C104K	16V 0.1U	2	
C730	F3F0J106A007	6.3V 10U	1	
C732	RCST0GY476RG	4V 47U	1	F3F0G4760001
C750,51	ECUVNA105ZFV	10V 1U	2	F1H1A105A030
C770	ECJ1VB1H102K	50V 1000P	1	
C904	ECJ1VB1C104K	16V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C1023	F1H1H220A230	50V 22P	1	
C1030	ECEA0GKS470	4V 47U	1	
C1032	ECUV1C105KBN	16V 1U	1	F1J1C1050025
C1033	ECUV1H101JCV	50V 100P	1	ECJ1VC1H101J
C1034	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C1035	ECJ1VB1E223K	25V 0.022U	1	
C1036	F1H1H390A230	50V 39P	1	
C1037	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C1038	ECUV1C105KBN	16V 1U	1	F1J1C1050025
C1103	ECUV1H680GCV	50V 68P	1	ECJ1VC1H680G
C1105	RCSX0GY226RE	4V 22U	1	F3F0G226A001
C1110	ECJ1VC1H050C	50V 5P	1	
C1111	ECUV1H470JCV	50V 47P	1	ECJ1VC1H470J
C1112	ECUV1H560GCV	50V 56P	1	F1H1H560A002
C1115,16	ECJ1VB1H102K	50V 1000P	2	
C1123	ECJ1VB1H102K	50V 1000P	1	
C1151	ECUVNC473KBV	16V 0.047U	1	F1H1C473A071
C1153	ECUVNC105KBN	16V 1U	1	F1J1C105A091
C1155	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C1157	ECJ1VC1H120J	50V 12P	1	
C1159	ECUV1H221KBV	50V 220P	1	ECJ1VB1H221K
C1160	ECUV1H470JCV	50V 47P	1	ECJ1VC1H470J
C1200	RCST0GY476RG	4V 47U	1	F3F0G4760001
C1202,03	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C1204	ECJ1VC1H040C	50V 4P	1	
C1206	ECUVNC333KBV	16V 0.033U	1	F1H1C333A071
C1207	F1H1H471A002	50V 470P	1	
C1210	ECUV1H100DCV	50V 10P	1	ECJ1VC1H100D
C1212	ECUVNA105ZFV	10V 1U	1	F1H1A105A030
C1215	RCST1AY475RE	10V 4.7U	1	F3F1A475A001
C1216	ECUVNJ474KBV	6.3V 0.47U	1	F1H0J474A002
C1221	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C1223	ECUVNC473KBV	16V 0.047U	1	F1H1C473A071
C1225	ECUVNA105ZFV	10V 1U	1	F1H1A105A030
C1228,29	ECJ1VB1H822K	50V 8200P	2	
C1230-32	ECJ1VB1C104K	16V 0.1U	3	
C1234	ECJ1VB1C104K	16V 0.1U	1	
C1235	ECUVNA105ZFV	10V 1U	1	F1H1A105A030
C1236	ECJ1VB1H102K	50V 1000P	1	
C1239	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C1240	ECJ1VB1C104K	16V 0.1U	1	
C1242	ECJ1VB1H102K	50V 1000P	1	
C1250	ECUV1H221KBV	50V 220P	1	ECJ1VB1H221K
C1251	ECJ1VB1H102K	50V 1000P	1	
C1271	F1H1A105A028	10V 1U	1	
C1272	ECUV1H221KBV	50V 220P	1	ECJ1VB1H221K
C1308	ECJ1VB1C104K	16V 0.1U	1	
C1309	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C1310	ECJ1VB1C104K	16V 0.1U	1	
C1311	F3F0J106A007	6.3V 10U	1	
C1313	ECJ1XC1H180J	50V 18P	1	
C1314	ECJ1VC1H150J	50V 15P	1	
C1315	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C1317	RCST0GY476RG	4V 47U	1	F3F0G4760001

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C1322	ECUVNJ474KBV	6.3V 0.47U	1	F1H0J474A002
C1333	ECUVNA105ZFV	10V 1U	1	F1H1A105A030
C1350	ECJ1VB1C104K	16V 0.1U	1	
C1500	F3F0J106A007	6.3V 10U	1	
C1501	ECJ1VB1H562K	50V 5600P	1	
C1502,03	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C1504	ECJ1VF1C474Z	16V 0.47U	1	
C1505	ECJ1VB1H562K	50V 5600P	1	
C1506,07	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C1508	RCSX0GY226RE	4V 22U	1	F3F0G226A001
C1509,10	ECUVNA105ZFV	10V 1U	2	F1H1A105A030
C1511,12	ECJ1VB1H102K	50V 1000P	2	
C1520,21	ECUVNA105ZFV	10V 1U	2	F1H1A105A030
CN301	RJS2A6130T	CONNECTOR(30P)	1	K1MN30A00023
CNY11	K4BC03B00014	BATTERY TERMINAL	1	
CY902	ECJ1VB1E223K	25V 0.022U	1	
D101	MA2J11100L	DIODE	1	
D701	MA2J11100L	DIODE	1	
D1010	MA147TX	DIODE	1	MA3J14700L
D1011	MA8120	DIODE	1	MAZ8120
D1101,02	KV1450TL3-4	DIODE	2	B0CDBB000006
D1201	KV1610STL2-0	DIODE	1	B0CDBB000004
DY22	MA2J11100L	DIODE	1	
FP101	K1MN24B00093	CONNECTOR(24P)	1	
IC11	AN41506A-VB	IC	1	
IC13	C0CBAAB00039	IC	1	
IC101	AN22003A-NF	IC	1	
IC102	C0ABAA000068	IC	1	
IC301	C2BBGE000658	IC	1	
IC302	AK93C45BH-L	IC	1	C3EBCG000028
IC303	C0EBD0000066	IC	1	
IC501	MN6627911AC1	IC	1	
IC502	C3ABMB000027	IC	1	
IC701	C1BB00000786	IC	1	
IC1001	C1BB00000562	IC	1	
IC1008	C0CBAAC00107	IC	1	
IC1301	C2FBEB000002	IC	1	
IC1500	C0ZBZ0000515	IC	1	
ICP11	ERBFE1R50U	IC PROTECTOR	1	⚠
ICPY12	ERY32SB075VA	IC PROTECTOR	1	⚠
JK11	RJJ43K09-C	JK,DC IN	1	K2EB2B000006
JKY701	K2HC104B0013	JK,HEADPHONE	1	
L1-L4	RLBV252AV-Y	COIL	4	J0JBC0000019

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

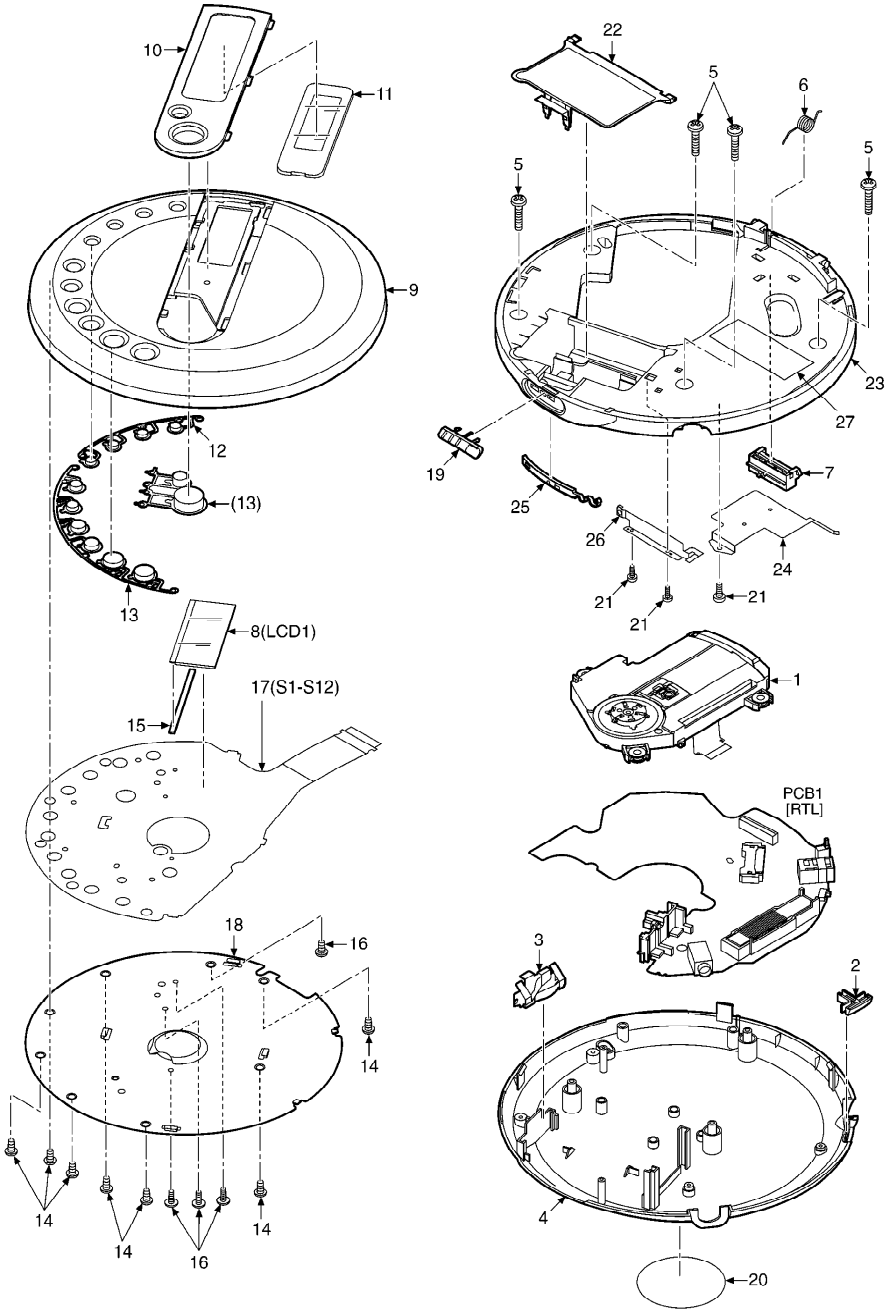
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L11	RLQU331KT-W	COIL	1	G1C331K00004
L12	G1C101MA0035	COIL	1	
L13	G1C101K00021	COIL	1	
L701-03	RLBV252AV-Y	COIL	3	J0JBC0000019
L1101	RLQM101NJT-W	COIL	1	G1CR10J00015
L1102	G5ZZ00000047	COIL	1	
L1103	RLQM101NJT-W	COIL	1	G1CR10J00015
L1156	RLQP68NMT2-Y	COIL	1	G1C68NM00003
L1157	RLQPR22KT2-Y	COIL	1	G1CR22KA0009
L1201	G2CBCB000017	COIL	1	
L1202	G3A124C00002	COIL	1	
LY704	RLBV252AV-Y	COIL	1	J0JBC0000019
P1	RPF0111-2	PROTECTION BAG	1	
P2	RPK1931	GIFT BOX	1	
P3	RPQ0836-3	PAD 1	1	
P4	RPQ1600	PAD 2	1	
PCB1	REP3521E-M	PCB ASS'Y	1	[RTL]
Q11	2SB1182TLPQR	TRANSISTOR	1	B1BDND000001
Q18	UN5113TW	TRANSISTOR	1	
Q19	UN5210TW	TRANSISTOR	1	UNR521000L
Q102	B1DHAC000002	TRANSISTOR	1	
Q201	2SB709A	TRANSISTOR	1	2SB0709A
Q301	UN5210TW	TRANSISTOR	1	UNR521000L
Q302	UN5214TX	TRANSISTOR	1	UNR521400L
Q303	UN5210TW	TRANSISTOR	1	UNR521000L
Q701	B1ADMB000003	TRANSISTOR	1	
Q703	XP1210	TRANSISTOR	1	XP01210
Q731	2SC3931CTX	TRANSISTOR	1	2SC39310CL
Q902	XP1210	TRANSISTOR	1	XP01210
Q1012,13	2SC4081STX	TRANSISTOR	2	B1ABCF000021
Q1151	2SK1067-4-TL	TRANSISTOR	1	B1CFCB000008
Q1152,53	2SD1819ASTX	TRANSISTOR	2	2SD1819ASL
Q1201	2SB815B7TX	TRANSISTOR	1	B1ADJB000001
Q1202	2SC4081STX	TRANSISTOR	1	B1ABCF000021
Q1203	UN5115TX	TRANSISTOR	1	UNR511500L
Q1204	UN5210TW	TRANSISTOR	1	UNR521000L
Q1206	UN5115TX	TRANSISTOR	1	UNR511500L
Q1207	2SC4081STX	TRANSISTOR	1	B1ABCF000021
Q1208	UN5115TX	TRANSISTOR	1	UNR511500L
Q1210	2SK1067-4-TL	TRANSISTOR	1	B1CFCB000008
Q1301	UN5214TX	TRANSISTOR	1	UNR521400L
Q1304	UN5213TX	TRANSISTOR	1	UNR521300L
Q1307,08	UN5214TX	TRANSISTOR	2	UNR521400L
Q1500,01	UN511MTX	TRANSISTOR	2	UNR511M00L
Q1502	UN5214TX	TRANSISTOR	1	UNR521400L
Q1503,04	B1CFHA000001	TRANSISTOR	2	
QY12	B1ABMD000004	TRANSISTOR	1	
QY13	UNR521L00L	TRANSISTOR	1	
QY14	UNR511400L	TRANSISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
QY16	UN5215TX	TRANSISTOR	1	UNR521500L
QY903	UN5113TW	TRANSISTOR	1	
QY904	UN5213TX	TRANSISTOR	1	UNR521300L
R2	D0YBR0000010	10K	1	
R3,R4	ERJ3GEYJ102V	1/16W 1K	2	
R5	ERJ3GEYJ101	1/16W 100	1	D0GB101JA002
R13	ERJ3GEYJ102V	1/16W 1K	1	
R14	ERJ3RBD473	1/16W 47K	1	
R15	ERJ3RBD683V	1/16W 68K	1	
R16	ERJ3GEYJ104	1/16W 100K	1	
R22	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R31	ERJ3GEYJ333V	1/16W 33K	1	D0GB333JA002
R45	ERJ3RBD473	1/16W 47K	1	
R47	ERJ3RBD392V	1/16W 3.9K	1	
R101	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R103	ERJ3GEYJ562V	1/16W 5.6K	1	D0GB562JA002
R110	ERJ3GEYJ100	1/16W 10	1	
R120	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R121	ERJ3GEYJ393V	1/16W 39K	1	D0GB393JA002
R122	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R130	ERJ3GEYJ104	1/16W 100K	1	
R201	ERJ3GEYJ2R2V	1/16W 2.2	1	D0GB2R2JA002
R202	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R220	ERJ3GEY0R00V	1/16W 0	1	
R222	ERJ3GEYJ104	1/16W 100K	1	
R300	ERJ3GEYJ102V	1/16W 1K	1	
R304	ERJ3GEYJ105V	1/16W 1M	1	
R313	EXBV8V104JV	1/16W 100K	1	
R325	ERJ3GEYJ333V	1/16W 33K	1	D0GB333JA002
R351	ERJ3GEYJ102V	1/16W 1K	1	
R353,54	ERJ3GEYJ102V	1/16W 1K	2	
R361	ERJ3GEYJ102V	1/16W 1K	1	
R362,63	ERJ3GEYJ104	1/16W 100K	2	
R364	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R365	ERJ3GEYJ104	1/16W 100K	1	
R372	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R502	ERJ3GEYJ683V	1/16W 68K	1	D0GB683JA002
R505	MCR03PZHJ561	1/16W 560	1	
R509	ERJ3GEYJ331V	1/16W 330	1	
R511	ERJ3GEYJ222V	1/16W 2.2K	1	
R512	EXBV4V222JV	1/16W 2.2K	1	
R513	ERJ3GEYJ154V	1/16W 150K	1	
R514	ERJ3GEYJ331V	1/16W 330	1	
R600	ERJ3GEYJ150V	1/16W 15	1	
R603	EXBV4V561JV	1/32W 560	1	
R705,06	ERJ3GEYJ3R3V	1/16W 3.3	2	
R707,08	ERJ3GEYJ102V	1/16W 1K	2	
R709	ERJ3GEYJ122	1/16W 1.2K	1	
R713,14	ERJ3GEYJ562V	1/16W 5.6K	2	D0GB562JA002
R715	ERJ3GEYJ122	1/16W 1.2K	1	
R720,21	ERJ3GEYJ100	1/16W 10	2	
R725	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R726	ERJ3GEYJ222V	1/16W 2.2K	1	

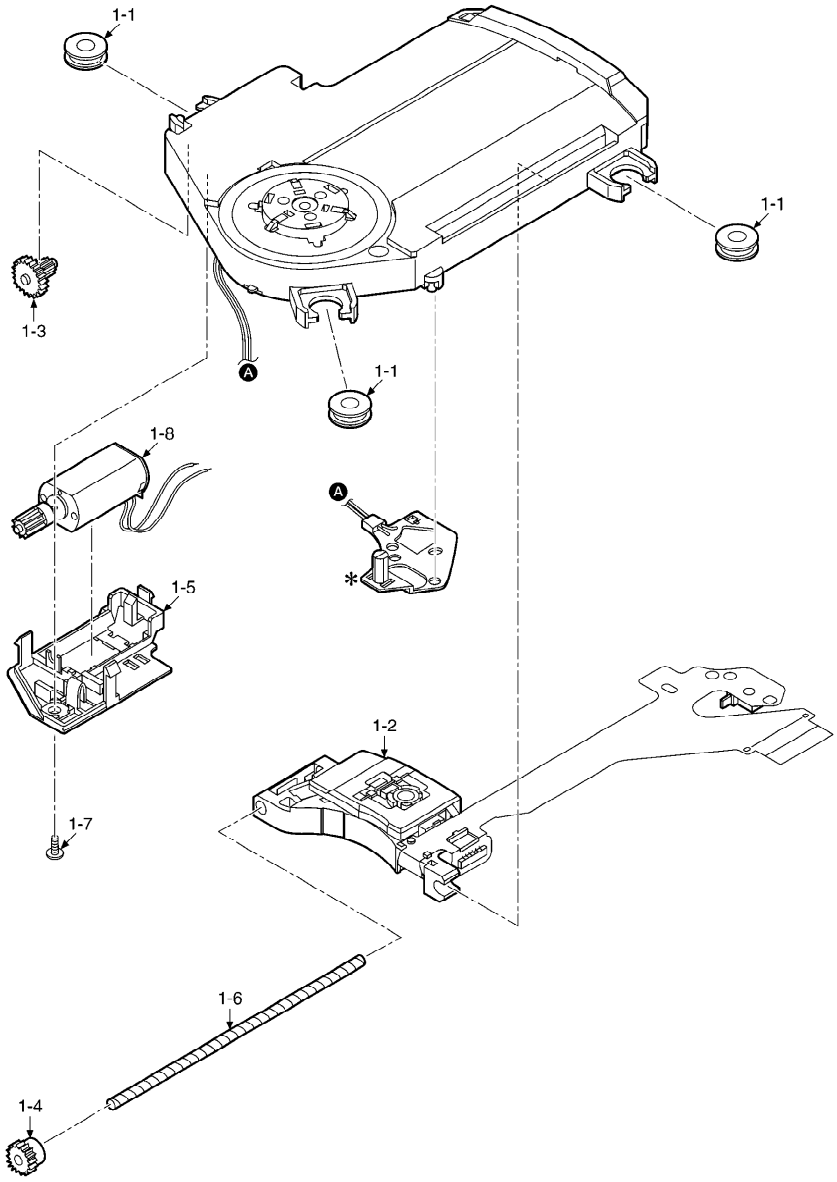
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R731	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R750,51	ERJ3GEYD153V	1/16W 15K	2	D0HB153ZA002
R760,61	ERJ3GEYJ152V	1/16W 1.5K	2	
R905	ERJ3GEYJ333V	1/16W 33K	1	D0GB333JA002
R1021	ERJ3GEYJ333V	1/16W 33K	1	D0GB333JA002
R1022	ERJ3GEYJ104	1/16W 100K	1	
R1023,24	ERJ3GEYJ221V	1/16W 220	2	
R1025	ERJ3GEYJ4R7V	1/16W 4.7	1	
R1109	EXBV4V474JV	1/32W 470K	1	
R1130	ERJ3GEYJ274V	1/16W 270K	1	
R1131	ERJ3GEYJ104	1/16W 100K	1	
R1151	ERJ3GEYJ183V	1/16W 18K	1	D0GB183JA002
R1153	ERJ3GEYJ682V	1/16W 6.8K	1	D0GB682JA002
R1154	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R1155	ERJ3GEYJ4R7V	1/16W 4.7	1	
R1159	ERJ3GEYJ471V	1/16W 470	1	
R1160	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R1170	ERJ3GEYJ470V	1/16W 47	1	
R1201	ERJ3GEYJ472V	1/16W 4.7K	1	
R1202	MCR03PZHJ561	1/16W 560	1	
R1203	ERJ3GEYJ121V	1/16W 120	1	
R1204	ERJ3GEYJ474V	1/16W 470K	1	
R1205	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R1206	ERJ3GEYJ224V	1/16W 220K	1	D0GB224JA002
R1218	ERJ3GEYJ102V	1/16W 1K	1	
R1230	ERJ3GEYJ272V	1/16W 2.7K	1	
R1231	ERJ3GEY0R00V	1/16W 0	1	
R1232	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R1233	ERJ3GEYJ331V	1/16W 330	1	
R1234	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R1235	ERJ3GEYJ221V	1/16W 220	1	
R1240	ERJ3GEYJ391V	1/16W 390	1	
R1303	ERJ3GEYJ393V	1/16W 39K	1	D0GB393JA002
R1310	EXBV4V104JV	1/32W 100K	1	
R1331	ERJ3RBD393	1/16W 39K	1	
R1365	ERJ3RBD683V	1/16W 68K	1	
R1371	EXBV4V104JV	1/32W 100K	1	
R1380	ERJ3GEYJ273V	1/16W 27K	1	D0GB273JA002
R1381	ERJ3GEYJ474V	1/16W 470K	1	
R1385	ERJ3GEYD153V	1/16W 15K	1	D0HB153ZA002
R1500	ERJ3GEYJ682V	1/16W 6.8K	1	D0GB682JA002
R1501	ERJ3GEYJ105V	1/16W 1M	1	
R1502	ERJ3GEYJ682V	1/16W 6.8K	1	D0GB682JA002
R1503	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R1504	ERJ3GEYJ104	1/16W 100K	1	
R1509,10	ERJ3GEYJ222V	1/16W 2.2K	2	
R1520,21	ERJ3GEYJ333V	1/16W 33K	2	D0GB333JA002
R1533	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
RY1	D0YBR0000010	10K	1	
RY10	ERJ3GEYJ271V	1/16W 270	1	
RY17	ERJ12YJ1R8U	1/2W 1.8	1	
RY36	ERJ3GEYJ474V	1/16W 470K	1	
RY901	ERJ3GEYD153V	1/16W 15K	1	D0HB153ZA002

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
RY906	ERJ3GEYJ470V	1/16W 47	1	
RY910	ERJ3GEYD153V	1/16W 15K	1	D0HB153ZA002
RY1368, / 69	ERJ3GEYJ102V	1/16W 1K	2	
S201	ESE11MV9T	SW,LASER ON/OFF	1	
S202	K0L1BB000025	SW,REST DET.	1	
S310	RSS2A010-1A	SW,HOLD	1	K0D112B00071
VR1101	D3DA3304A002	VR,FM RF ADJ.	1	
X501	H2D169500026	OSCILLATOR	1	
X1101	RLFFETNL02AL	CERAMIC FILTER	1	J0B1075A0081
X1201	J0B4503A0061	CERAMIC FILTER	1	
X1203	J0B1075A0104	CERAMIC FILTER	1	
X1301	H0J750200009	OSCILLATOR	1	

17. Cabinet Parts Location

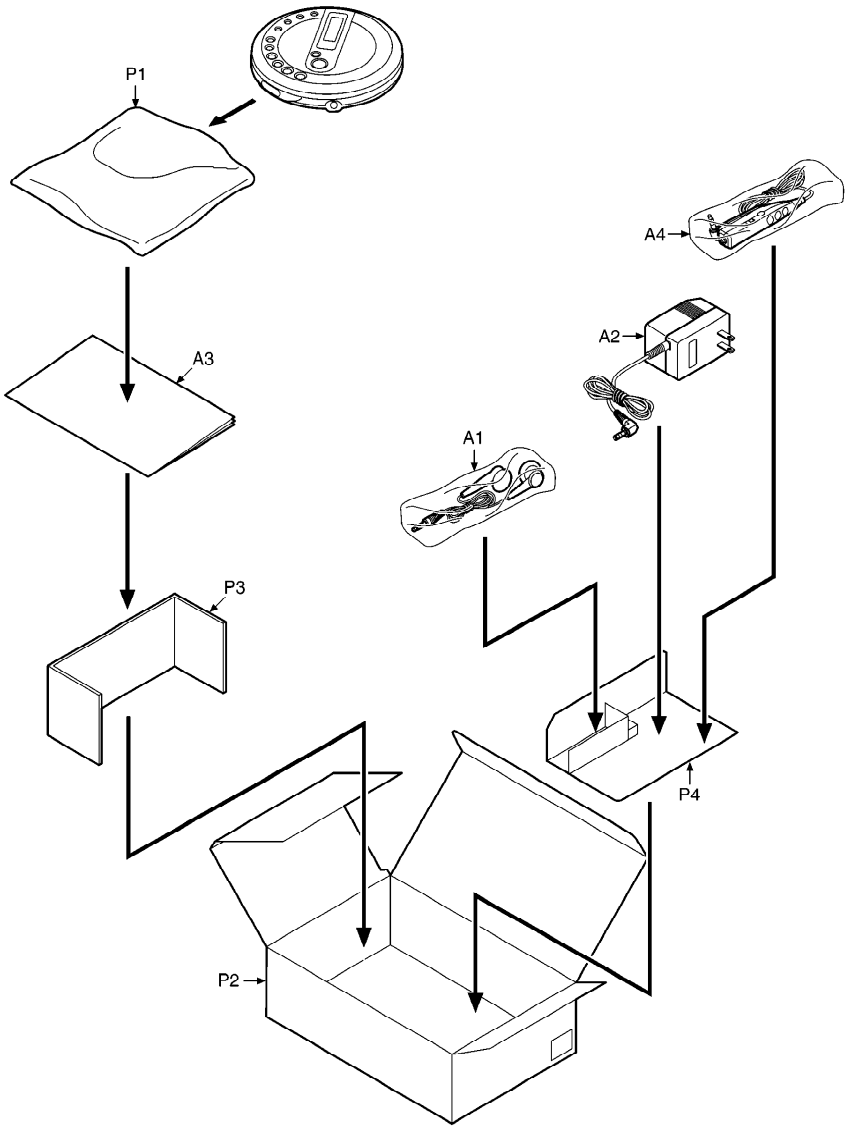


18. Traverse Unit Parts Location



Note : We do not supply those items of parts marked ✻.

19. Packaging



20. Schematic Diagram for printing with letter size

F0305KH

:POSITIVE VOLTAGE LINE :FM SIGNAL LINE

Q1208
UN5115TX
SWITCHING(AM:ON)

Q1210
2SK1067-4-TL
AM RF AMP

Q1151
2SK1067-4-TL
STABILIZER

Q1152

Q1153

Q1152,1153
2SD1819ASTX
FM/ AM LOOP FILTER

Q1012
2SC4081STX
DC-DC CONV.

Q1013
2SC4081STX
DC-DC CONV.

Q1201
2SB815B7TX
POWER SUPPLY

TUNER +B LINE

IC1008
C0CBAAC00107
REGULATOR

Vss V OUT V IN

D1010
MA147TX

D1011
MA8120MTX

D1201
KV1610STL2-0

D1101
KV1450TL3-4

D1102
KV1450TL3-4

FM RF ADJ.

Q1206
UN5115TX
SWITCHING
(AM:ON)

Q1501
UN511MTX
POWER SUPPLY

Q1502
UN5214TX
POWER SUPPLY
CONT.

Q1500
UN511MTX
POWER SUPPLY

IC1500
C0ZBZ0000515
TONE CONTROL

ALC IN-R TREBLE-R BASSI-R BASSO-R OUT-R CREF GND

VS IN-L TREBLE-L BASSI-L BASSO-L OUT-L SDA SCL

Q1503
2SK1958T1
SWITCHING

Q1504
2SK1958T1
SWITCHING

IC1001
C1BB00000562
FM/AM RF AMP
IF,DET

RF Vcc
AM OSC
FM OSC
PW SW
BUFF
TUN IND
ST IND
SW
1/ 16
ST/ MO FM/ AM
AM MIX
IF BUFF
AM DET
LEVEL DET
FM DET
FM IF
AM IF
AF
FM MPX
FM RF
FM MIX
AGC
RF GND
Vcc
GND

Q1202
2SC4081STX
SWITCHING(CITY)

Q1203
UN5115TX
SWITCHING(CITY)

Q1204
UN5210TX
SWITCHING(MONO)

Q1207
2SC4081STX
FILTER AMP

FM IN

FM GND

X1201

X1101

L1101 L1102 L1103 L1201 L1202 L1156 L1157

C1101 C1102 C1103 C1104 C1105 C1106 C1107 C1108 C1109 C1110 C1111 C1112 C1113 C1114 C1115 C1116 C1117 C1118 C1119 C1120 C1121 C1122 C1123 C1124 C1125 C1126 C1127 C1128 C1129 C1130 C1131 C1132 C1133 C1134 C1135 C1136 C1137 C1138 C1139 C1140

:POSITIVE VOLTAGE LINE :FM SIGNAL LINE :MAIN(CD,FM) SIGNAL LINE

OPERATION & LCD UNIT

LCD1(L5AAAEB00046)
LCD DISPLAY
A B C D E F G H I J K L M N O P Q R S T U V

IC1301
C2FBEB000002
SYSTEM CONTROL/
LCD DRIVE

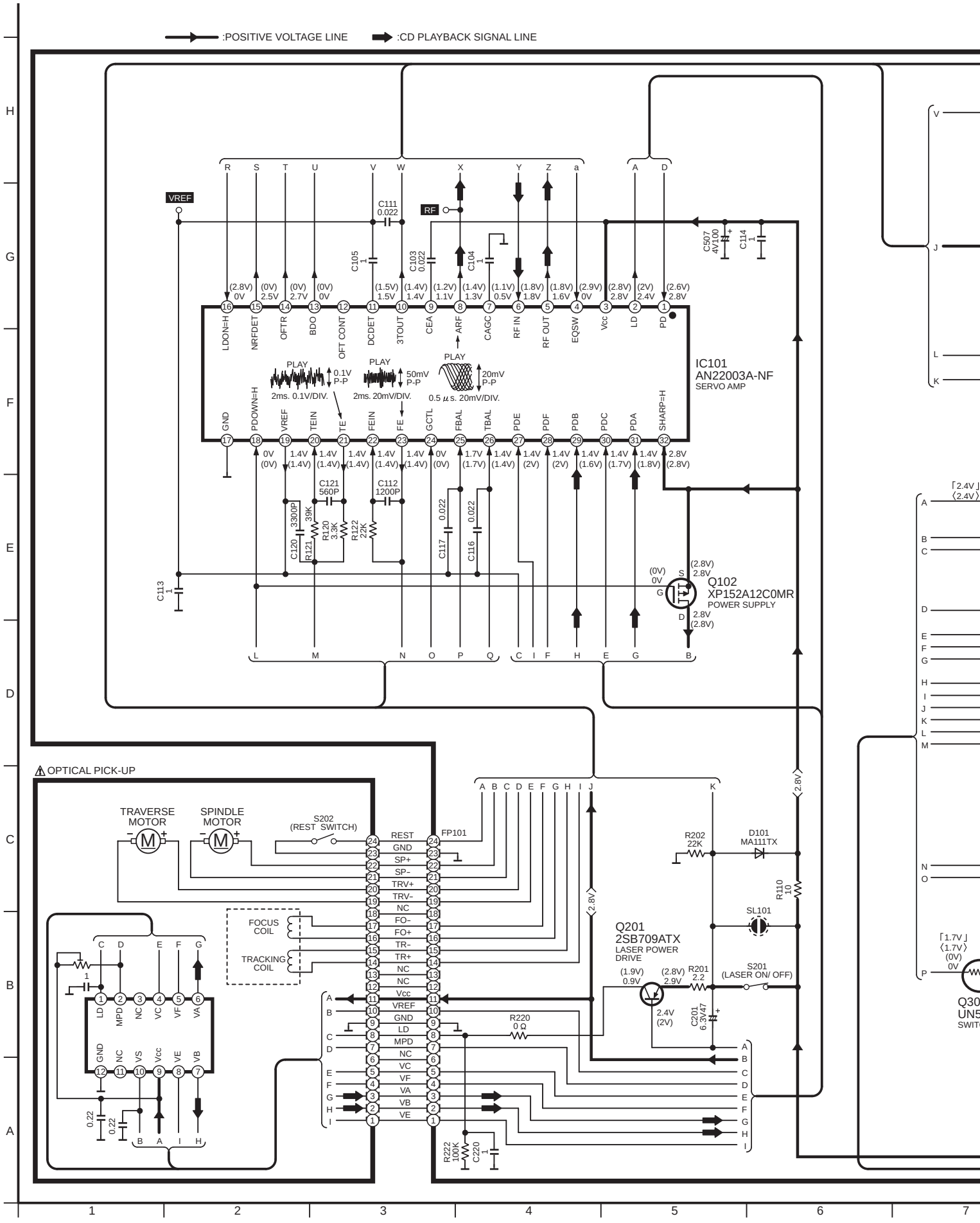
Q1307 UN5214TX INTERFACE
Q1308 UN5214TX INTERFACE
Q1304 UN5213TX DC IN DET. (AC ADAPTOR)
Q1301 UN5214TX INTERFACE

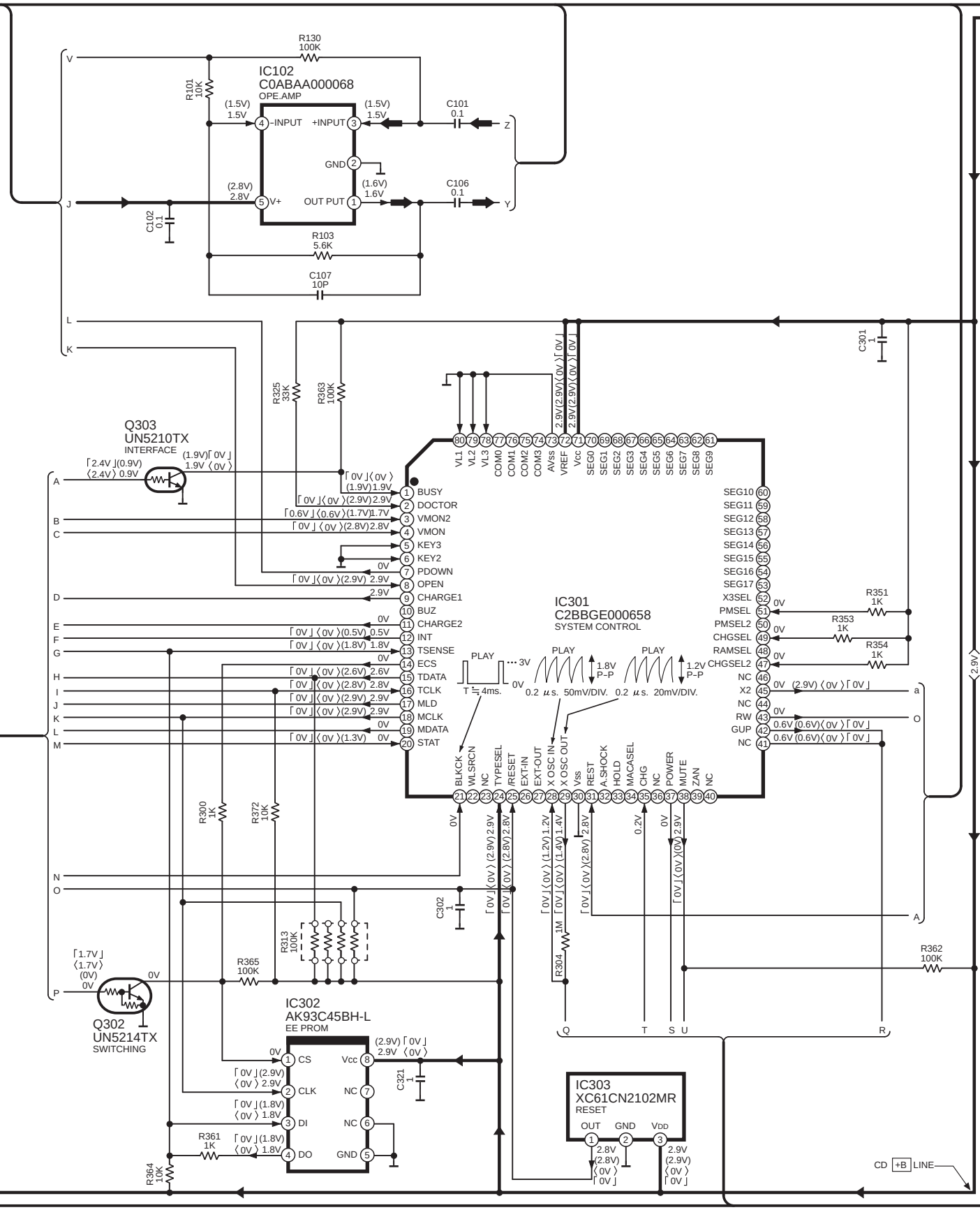
Q11 2SB1182TLPQR REGULATOR
QY12 B1ABMD000004 CHARGE CONT.
QY13 UN521LTX CHARGE CONT.
QY14 UN5114TX CHARGE CONT.
QY16 UN5215TX DC IN DET. (BATTERIES)

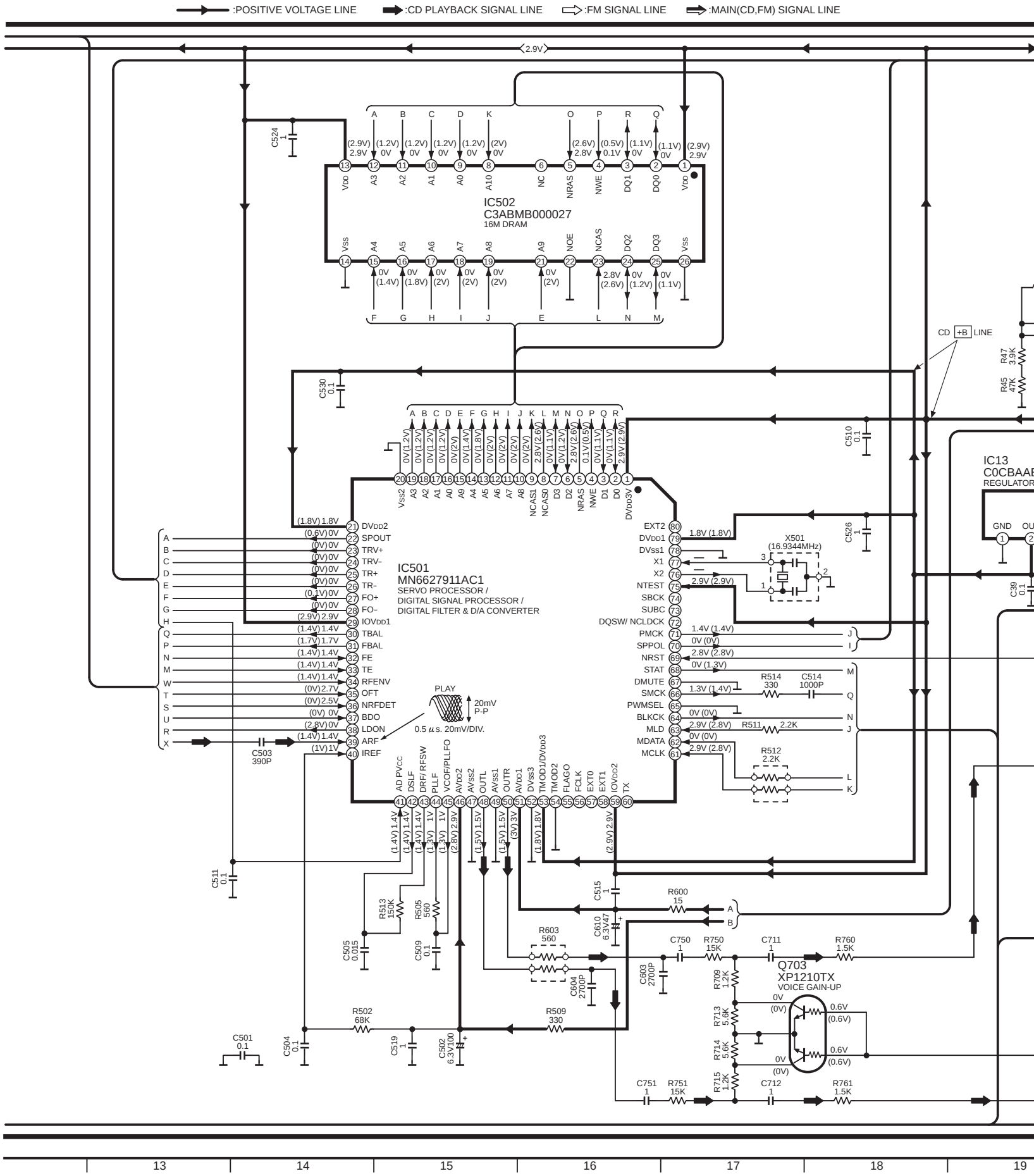
S12 (▶/❚❚)
S11 (RADIO/ BAND)
S6 (■ ,OPR OFF)
S10 (TUNING MODE)
S9 (VOL -)
S8 (MEMORY/ RECALL)
S7 (▶▶I , +)
S5 (VOL +)
S4 (FM MODE MONO/ ST)
S3 (FM RECEPT, CITY/ NOR.MODE)
S2 (▶▶I , -)
S1 (S-XBS)
S310 (HOLD) OFF ON

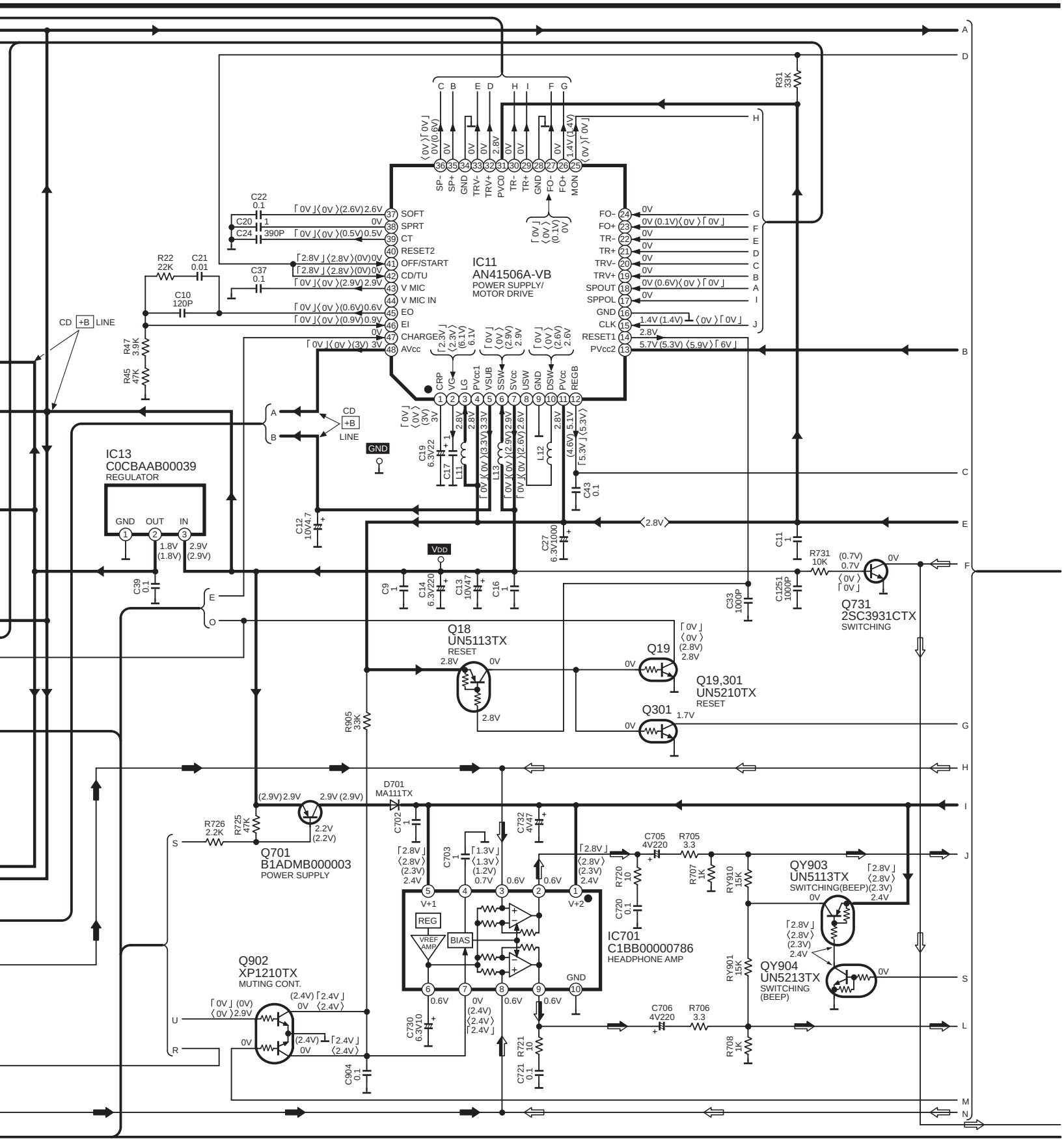
JK11 DC IN 4.5V
JKY701 HEADPHONE
2 R6/ LR6(UM-3) BATTERIES 3V

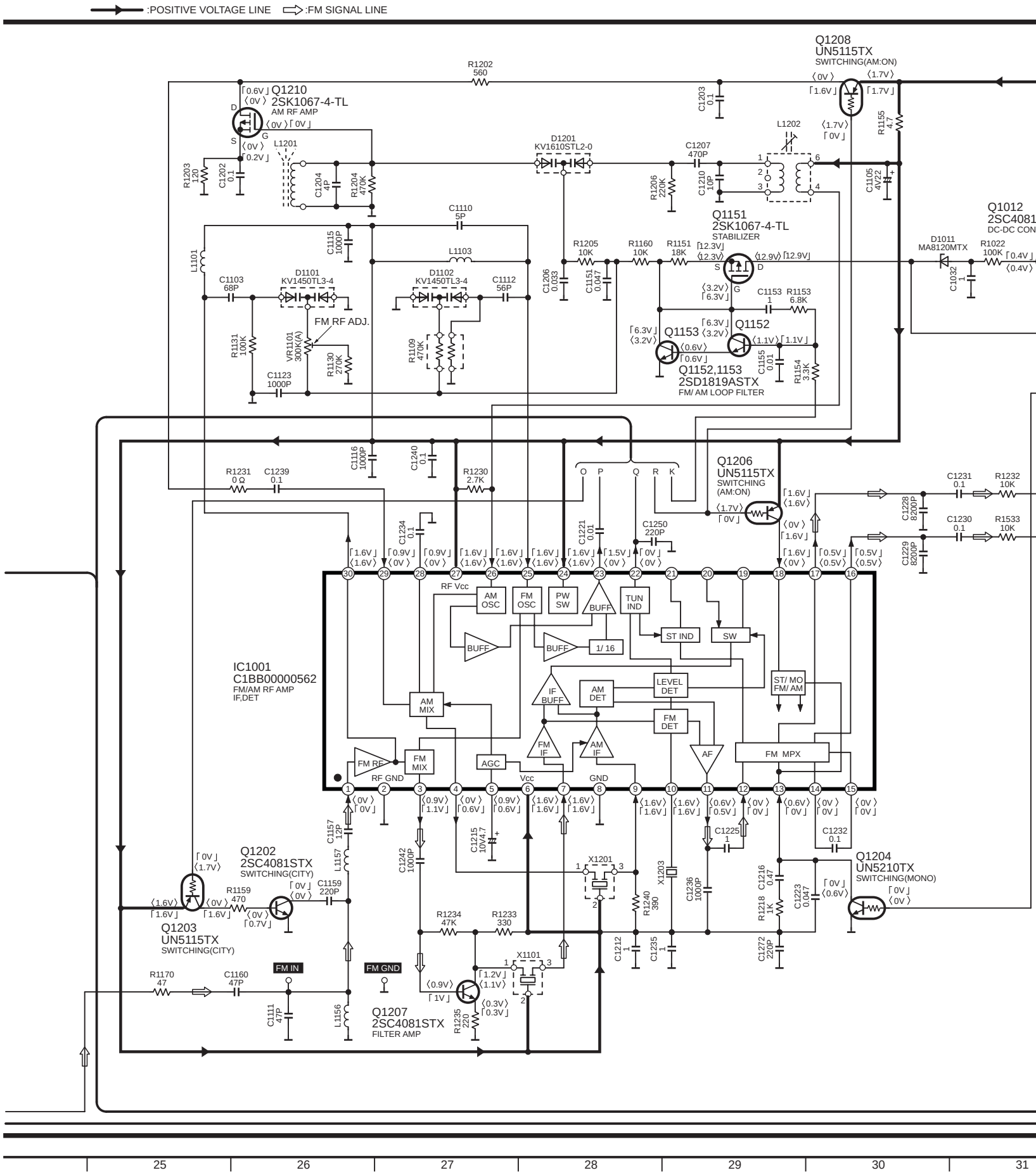
SL-SV550(GK) CIRCUIT DIAGRAM

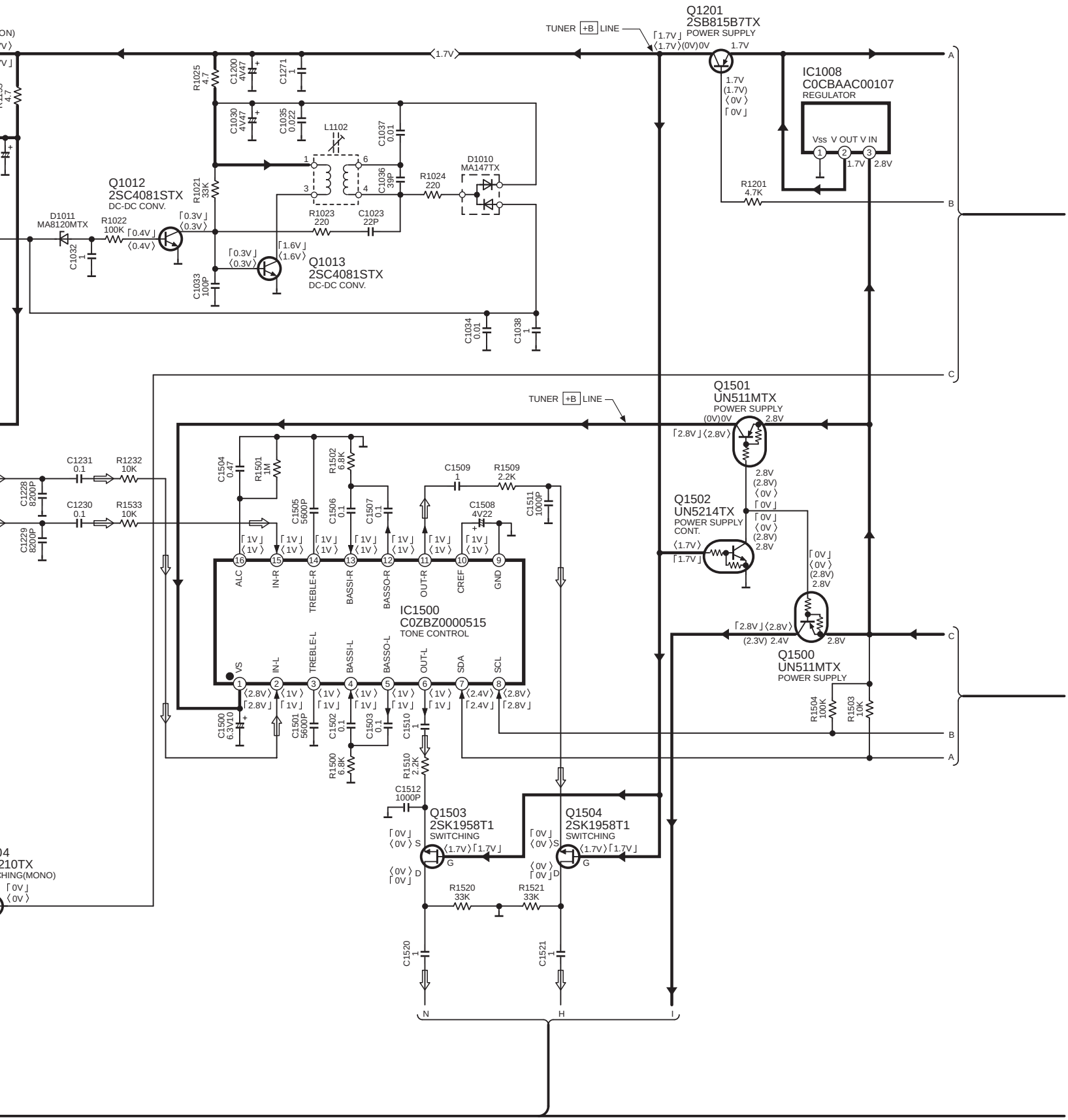

:POSITIVE VOLTAGE LINE
:CD PLAYBACK SIGNAL LINE
VREF
RF
IC101
AN22003A-NF
SERVO AMP
LDON=H
NRFDET
OFTR
BDO
OFT CONT
DCDET
3TOUT
CEA
ARF
CAGC
RF IN
RF OUT
EQSW
Vcc
LD
PD
GND
PDOWN=H
VREF
TEIN
TE
FEIN
FE
GCTL
FBAL
TBAL
PDE
PDF
PDB
PDC
PDA
SHARP=H
PLAY
0.1V P-P
2ms. 0.1V/DIV.
50mV P-P
2ms. 20mV/DIV.
20mV P-P
0.5 μs. 20mV/DIV.
C111 0.022
C105 1
C103 0.022
C104 1
C507 4V100
C114 1
C121 560P
C112 1200P
C120 3300P
R121 39K
R120 3.3K
R122 22K
C117 0.022
C116 0.022
C113 1
Q102
XP152A12C0MR
POWER SUPPLY
OPTICAL PICK-UP
TRAVERSE MOTOR
SPINDLE MOTOR
S202
(REST SWITCH)
FP101
REST
GND
SP+
SP−
TRV+
TRV-
NC
FO−
FO+
TR−
TR+
NC
NC
Vcc
VREF
GND
LD
MPD
NC
VC
VF
VA
VB
VE
FOCUS COIL
TRACKING COIL
LD
MPD
NC
VC
VF
VA
GND
NC
VS
Vcc
VE
VB
R220 0 Ω
R222 100K
C220 1
R202 22K
D101
MA111TX
R110 10
SL101
Q201
2SB709ATX
LASER POWER DRIVE
R201 2.2
S201
(LASER ON/ OFF)
C201 6.3V47
2.8V
Q30
UN5
SWIT


IC102
C0ABAA000068
OPE.AMP
-INPUT
+INPUT
GND
V+
OUT PUT
R130 100K
R101 10K
R103 5.6K
C101 0.1
C102 0.1
C106 0.1
C107 10P
Q303
UN5210TX
INTERFACE
Q302
UN5214TX
SWITCHING
IC301
C2BBGE000658
SYSTEM CONTROL
BUSY
DOCTOR
VMON2
VMON
KEY3
KEY2
PDOWN
OPEN
CHARGE1
BUZ
CHARGE2
INT
TSENSE
ECS
TDATA
TCLK
MLD
MCLK
MDATA
STAT
PLAY
T = 4ms.
0.2 µs. 50mV/DIV.
0.2 µs. 20mV/DIV.
1.8V P-P
1.2V P-P
IC302
AK93C45BH-L
EE PROM
CS
CLK
DI
DO
Vcc
NC
GND
IC303
XC61CN2102MR
RESET
OUT
GND
VDD
R325 33K
R363 100K
R300 1K
R372 10K
R313 100K
R365 100K
R304 1M
R362 100K
R361 1K
R364 10K
R351 1K
R353 1K
R354 1K
C301 1
C302 1
C321 1
CD +B LINE

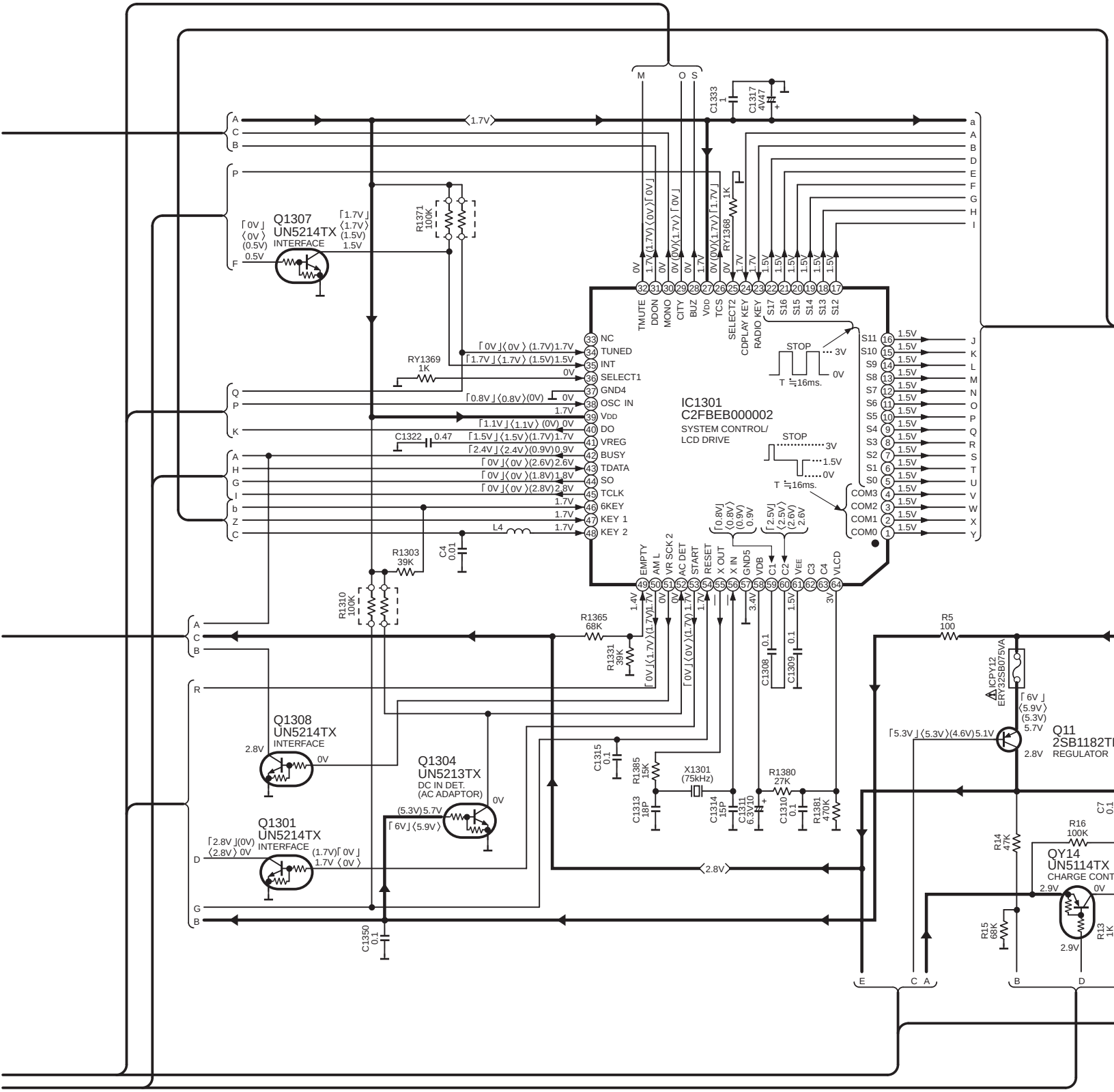

:POSITIVE VOLTAGE LINE
:CD PLAYBACK SIGNAL LINE
:FM SIGNAL LINE
:MAIN(CD,FM) SIGNAL LINE
2.9V
IC502
C3ABMB000027
16M DRAM
IC501
MN6627911AC1
SERVO PROCESSOR /
DIGITAL SIGNAL PROCESSOR /
DIGITAL FILTER & D/A CONVERTER
CD +B LINE
IC13
C0CBAAE
REGULATOR
X501
(16.9344MHz)
PLAY
20mV
P-P
0.5 μs. 20mV/DIV.
Q703
XP1210TX
VOICE GAIN-UP
C524 1
C530 0.1
C510 0.1
C526 1
C39 0.1
R47 3.9K
R45 47K
C503 390P
C511 0.1
C501 0.1
C504 0.1
C519 1
C502 6.3V100
C505 0.015
C509 0.1
C515 1
C610 6.3V47
C603 2700P
C604 2700P
R513 150K
R505 560
R603 560
R502 68K
R509 330
R600 15
R514 330
C514 1000P
R511 2.2K
R512 2.2K
C750 1
R750 15K
C711 1
R760 1.5K
R709 1.2K
R713 5.6K
R714 5.6K
R715 1.2K
C751 1
R751 15K
C712 1
R761 1.5K

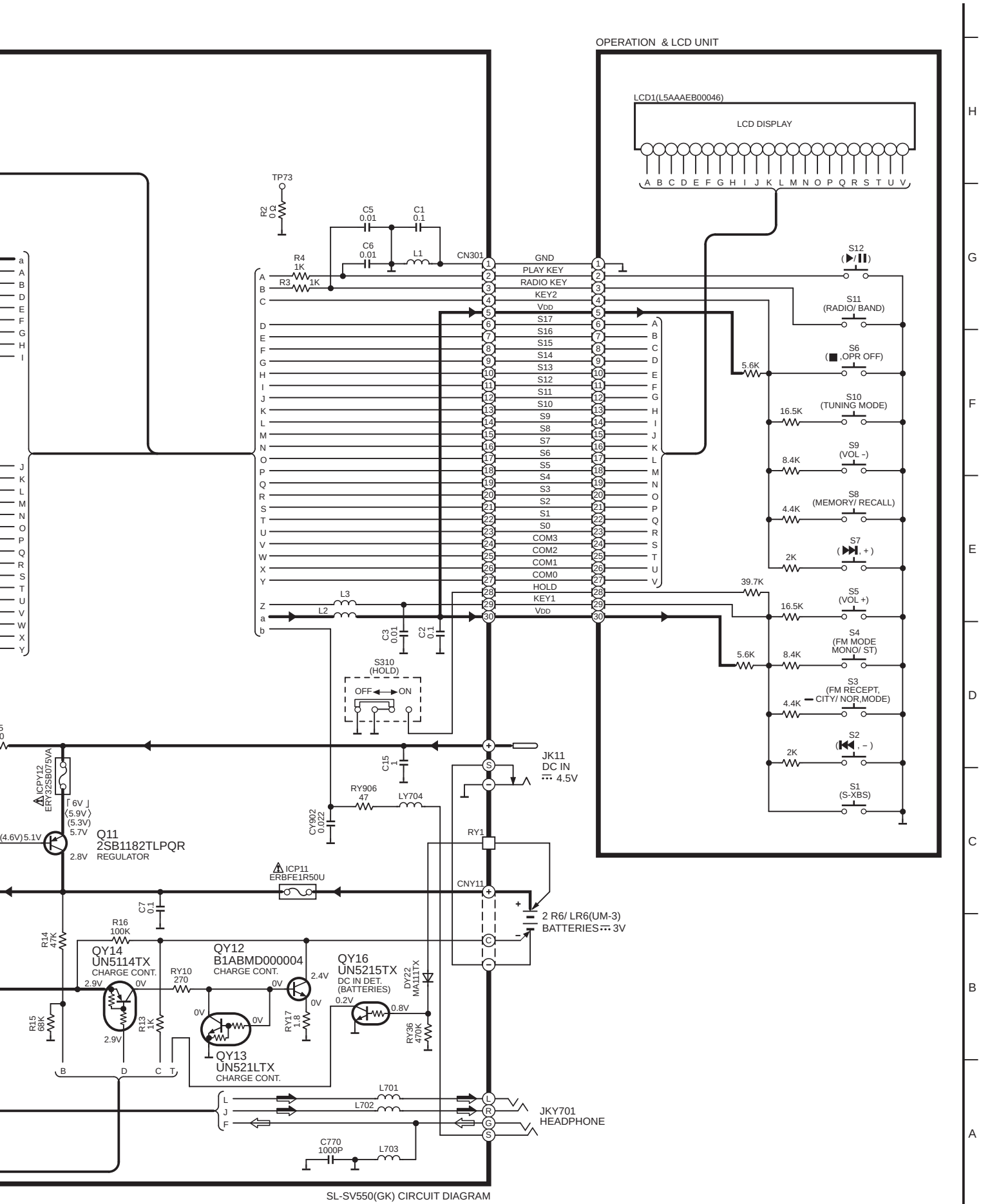

IC11
AN41506A-VB
POWER SUPPLY/
MOTOR DRIVE
IC13
C0CBAAB00039
REGULATOR
GND OUT IN
1.8V (1.8V)
2.9V (2.9V)
Q731
2SC3931CTX
SWITCHING
Q18
UN5113TX
RESET
Q19
Q19,301
UN5210TX
RESET
Q301
1.7V
Q701
B1ADMB000003
POWER SUPPLY
2.2V (2.2V)
D701
MA111TX
Q902
XP1210TX
MUTING CONT.
IC701
C1BB00000786
HEADPHONE AMP
REG
VREF AMP
BIAS
QY903
UN5113TX
SWITCHING(BEEP)
QY904
UN5213TX
SWITCHING
(BEEP)
CD +B LINE
GND
VDD
SOFT
SPRT
CT
RESET2
OFF/START
CD/TU
V MIC
V MIC IN
EO
EI
CHARGE
AVcc
FO-
FO+
TR-
TR+
TRV-
TRV+
SPOUT
SPPOL
CLK
RESET1
PVcc2
MON
PVCO
SP-
SP+
CRP
VG
LG
PVcc1
VSUB
SSW
SVcc
USW
DSW
PVcc
REGB
R31 33K
R22 22K
C21 0.01
C22 0.1
C20 1
C24 390P
C37 0.1
C10 120P
R47 3.9K
R45 47K
C19 6.3V22
C17
L11
L13
L12
C43 0.1
C12 10V4.7
C27 6.3V1000
C39 0.1
C9 1
C14 6.3V220
C13 10V47
C16 1
C11 1
R731 10K
C1251 1000P
C33 1000P
R905 33K
R726 2.2K
R725 47K
C702 1
C703 1
C732 4V47
C705 4V220
R705 3.3
R707 1K
R720 10
C720 0.1
RY910 15K
RY901 15K
C706 4V220
R706 3.3
R708 1K
C730 6.3V10
R721 10
C721 0.1
C904 0.1


:POSITIVE VOLTAGE LINE
:FM SIGNAL LINE
Q1208
UN5115TX
SWITCHING(AM:ON)
Q1210
2SK1067-4-TL
AM RF AMP
Q1151
2SK1067-4-TL
STABILIZER
Q1012
2SC4081
DC-DC CON
Q1153
Q1152
Q1152,1153
2SD1819ASTX
FM/ AM LOOP FILTER
FM RF ADJ.
D1201
KV1610STL2-0
D1101
KV1450TL3-4
D1102
KV1450TL3-4
D1011
MA8120MTX
Q1206
UN5115TX
SWITCHING
(AM:ON)
IC1001
C1BB00000562
FM/AM RF AMP
IF,DET
RF Vcc
AM OSC
FM OSC
PW SW
BUFF
TUN IND
ST IND
SW
1/ 16
AM MIX
IF BUFF
AM DET
LEVEL DET
ST/ MO FM/ AM
FM DET
FM IF
AM IF
AF
FM MPX
FM RF
FM MIX
AGC
RF GND
Vcc
GND
Q1202
2SC4081STX
SWITCHING(CITY)
Q1203
UN5115TX
SWITCHING(CITY)
Q1204
UN5210TX
SWITCHING(MONO)
Q1207
2SC4081STX
FILTER AMP
FM IN
FM GND
L1201
L1202
L1101
L1103
L1157
L1156
X1201
X1101
X1203
R1202 560
R1203 120
R1204 470K
R1205 10K
R1160 10K
R1151 18K
R1206 220K
R1155 4.7
R1131 100K
R1130 270K
R1109 470K
R1153 6.8K
R1154 3.3K
R1022 100K
R1231 0 Ω
R1230 2.7K
R1232 10K
R1533 10K
R1159 470
R1170 47
R1234 47K
R1233 330
R1240 390
R1218 1K
R1272 220P
R1235 220
C1202 0.1
C1204 4P
C1207 470P
C1210 10P
C1105 4V22
C1110 5P
C1115 1000P
C1103 68P
C1112 56P
C1123 1000P
C1206 0.033
C1151 0.047
C1153 1
C1155 0.01
C1032 1
C1116 1000P
C1240 0.1
C1239 0.1
C1234 0.1
C1221 0.01
C1250 220P
C1228 8200P
C1229 8200P
C1231 0.1
C1230 0.1
C1159 220P
C1157 12P
C1242 1000P
C1215 10V4.7
C1225 1
C1232 0.1
C1212 1
C1235 1
C1236 1000P
C1216 0.47
C1223 0.047
C1160 47P
C1111 47P
VR1101 300K(A)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
O P Q R K


Q1201
2SB815B7TX
POWER SUPPLY
TUNER +B LINE
1.7V
IC1008
C0CBAAC00107
REGULATOR
Vss V OUT V IN
Q1012
2SC4081STX
DC-DC CONV.
Q1013
2SC4081STX
DC-DC CONV.
D1010
MA147TX
D1011
MA8120MTX
L1102
R1201
4.7K
Q1501
UN511MTX
POWER SUPPLY
Q1502
UN5214TX
POWER SUPPLY
CONT.
Q1500
UN511MTX
POWER SUPPLY
IC1500
C0ZBZ0000515
TONE CONTROL
ALC
IN-R
TREBLE-R
BASSI-R
BASSO-R
OUT-R
CREF
GND
VS
IN-L
TREBLE-L
BASSI-L
BASSO-L
OUT-L
SDA
SCL
Q1503
2SK1958T1
SWITCHING
Q1504
2SK1958T1
SWITCHING
R1520
33K
R1521
33K
N
H
I
A
B
C

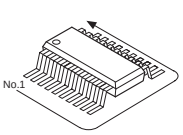
:POSITIVE VOLTAGE LINE :FM SIGNAL LINE :MAIN(CD,FM) SIGNAL LINE



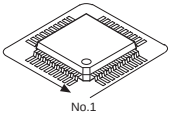


SL-SV550(GK) CIRCUIT DIAGRAM

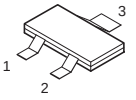
AN22003A-NF	32PIN
C1BB00000786	10PIN
C0ZBZ0000515	16PIN
C1BB00000562	30PIN



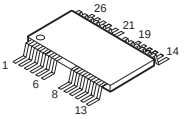
AN41506A-VB	48PIN
MN6627911AC1	80PIN
C2BBGE000658	80PIN
C2FBEB000002	64PIN



C0CBAAB00039
C0CBAAC00107
XC61CN2102MR



C3ABMB000027



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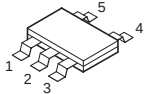
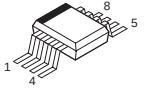
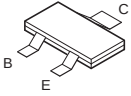


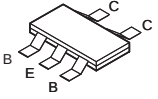
AK93C45BH-L



B1ADMB000003 UN5113TX
2SB709ATX UN5114TX
2SB815B7TX UN5115TX
2SC3931CTX UN521LTX
2SC4081STX UN5213TX
2SD1819ASTX UN5214TX
UN5210TX UN5215TX
UN511MTX



XP1210TX



XP152A12C0MR
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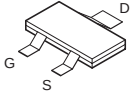
2SK1958T1



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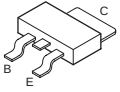

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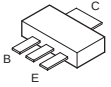
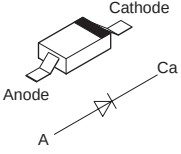
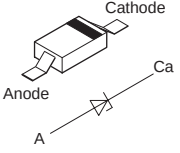


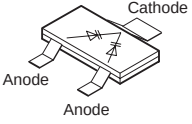
MA111TX



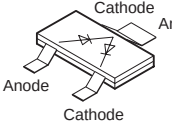
MA8120MTX

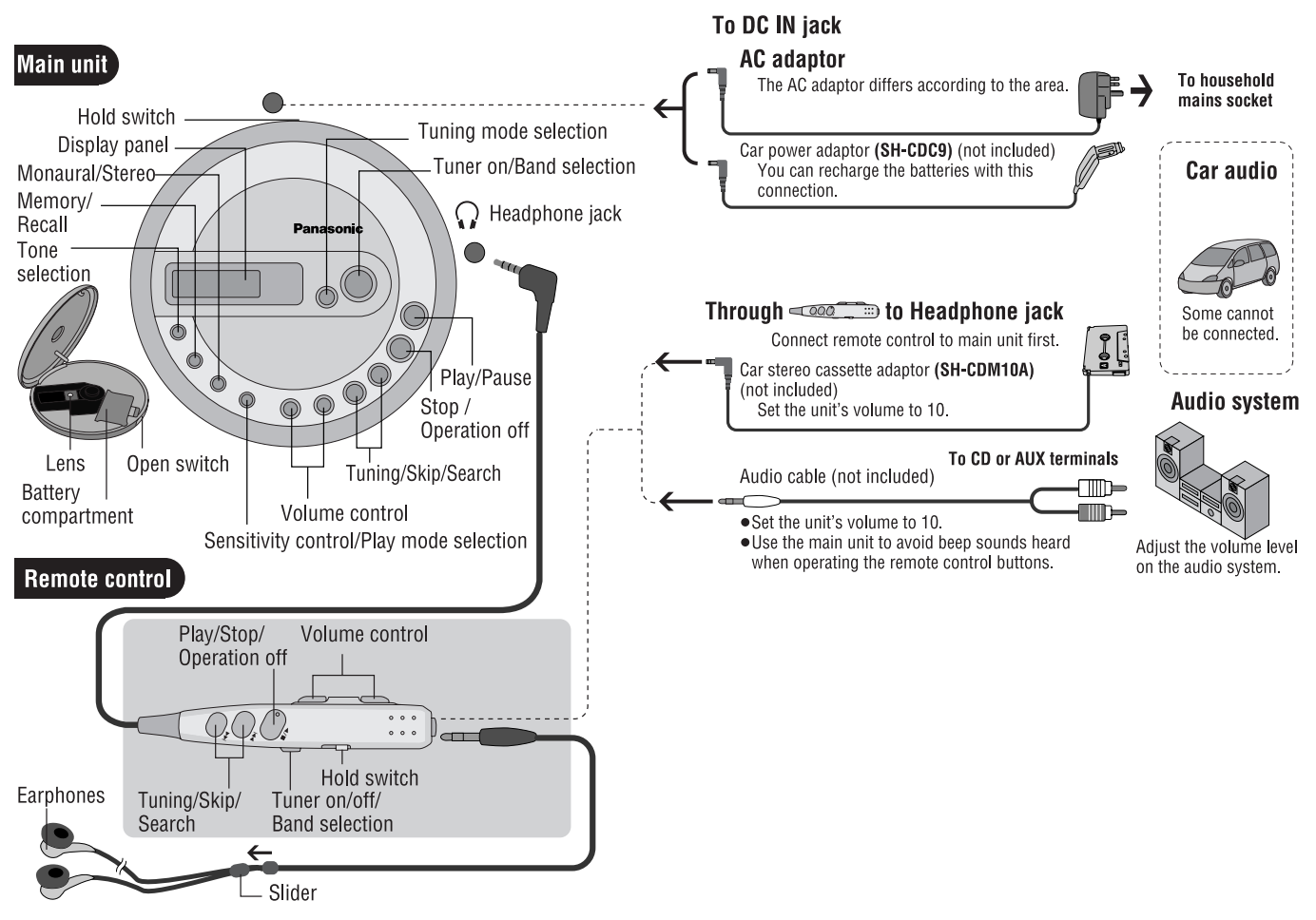


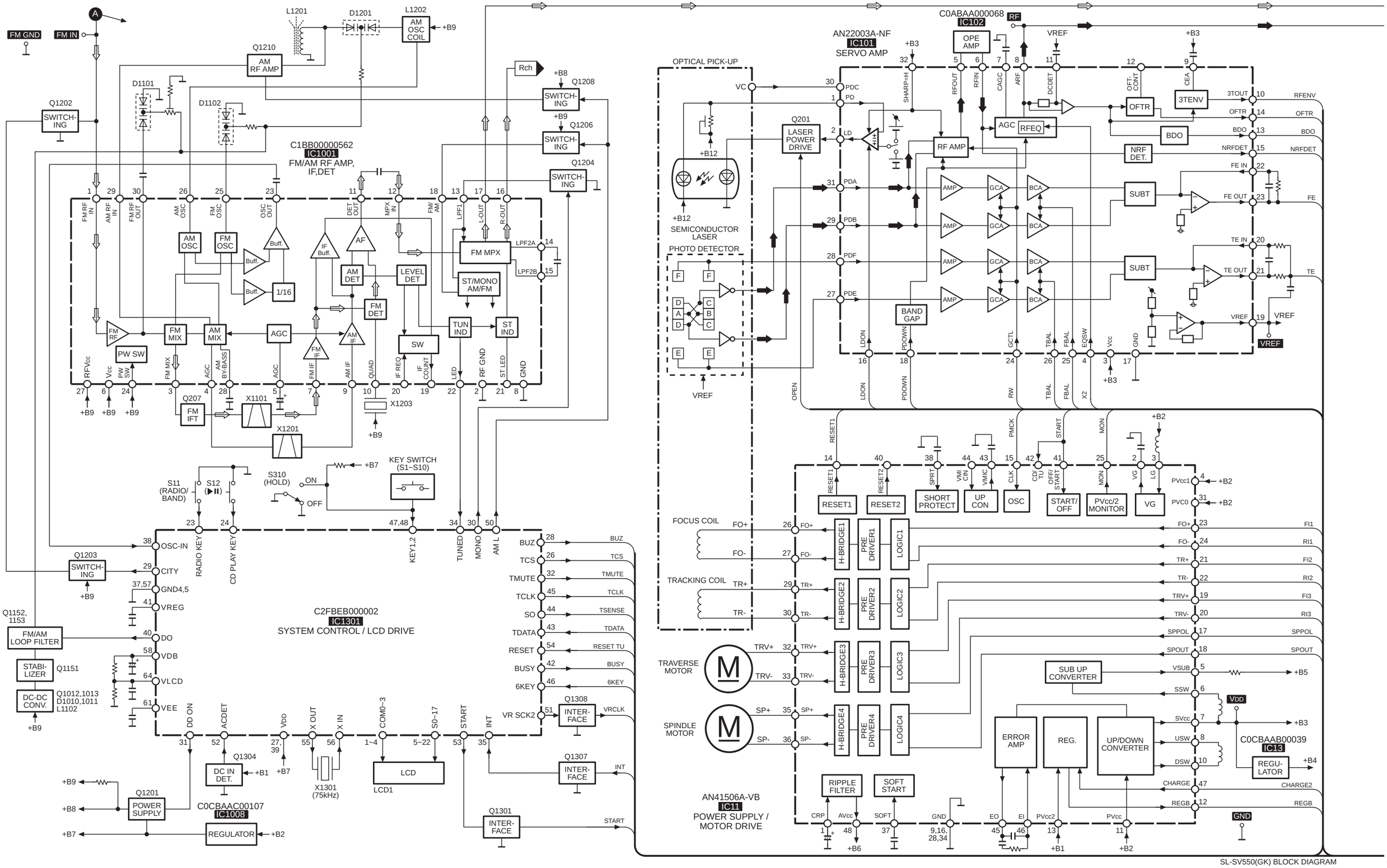
KV1450TL3-4
KV1610STL2-0



MA147TX




Main unit
Hold switch
Display panel
Monaural/Stereo
Memory/ Recall
Tone selection
Tuning mode selection
Tuner on/Band selection
Headphone jack
Panasonic
Play/Pause
Stop / Operation off
Lens
Open switch
Battery compartment
Tuning/Skip/Search
Volume control
Sensitivity control/Play mode selection
To DC IN jack
AC adaptor
The AC adaptor differs according to the area.
To household mains socket
Car power adaptor (SH-CDC9) (not included)
You can recharge the batteries with this connection.
Car audio
Some cannot be connected.
Through to Headphone jack
Connect remote control to main unit first.
Car stereo cassette adaptor (SH-CDM10A) (not included)
Set the unit's volume to 10.
Audio system
To CD or AUX terminals
Audio cable (not included)
Set the unit's volume to 10.
Use the main unit to avoid beep sounds heard when operating the remote control buttons.
Adjust the volume level on the audio system.
Remote control
Play/Stop/ Operation off
Volume control
Hold switch
Tuning/Skip/ Search
Tuner on/off/ Band selection
Earphones
Slider



SL-SV550(GK) BLOCK DIAGRAM

NOTE
- : CD PLAYBACK SIGNAL LINE
- : MAIN SIGNAL LINE
- : FM SIGNAL LINE
- ( ) indicates pin No. Right channel.

MN6627911AC1
IC501
SERVO PROCESSOR / DIGITAL SIGNAL PROCESSOR
DIGITAL FILTER & D/A CONVERTER

C0ZBZ0000515
IC1500
TONE CONTROL

C1BB00000786
IC701

C2BBGE000658
IC301
SYSTEM CONTROL

XC61CN2102MR
IC303

C3ABMB000027
IC502
16M DRAM

AK93C45BH-L
IC302
EE PROM

SL-SV550(GK) BLOCK DIAGRAM

Note: This printed circuit board diagram may be modified at any time with the development of new technology.

(SIDE:A)

(SIDE:B)

OPERATION & LCD UNIT

OPTICAL PICK-UP

(REP3521E-M)

2729A-2

FM GND

FM IN

RF

VREF

VDD

HOLD

DC IN 4.5V

GND

HEADPHONE

2 R6/LR6(UM-3) BATTERIES 3V

SL-SV550(GK) P.C.B.

:POSITIVE VOLTAGE LINE :CD PLAYBACK SIGNAL LINE

IC101
AN22003A-NF
SERVO AMP

Q102
XP152A12C0MR
POWER SUPPLY

IC102
C0ABAA000068
OPE.AMP

Q303
UN5210TX
INTERFACE

IC301
C2BBGE000658
SYSTEM CONTROL

Q302
UN5214TX
SWITCHING

IC302
AK93C45BH-L
EE PROM

IC303
XC61CN2102MR
RESET

Q201
2SB709ATX
LASER POWER DRIVE

D101
MA111TX

SL101

S201
(LASER ON/ OFF)

S202
(REST SWITCH)

TRAVERSE MOTOR

SPINDLE MOTOR

FOCUS COIL

TRACKING COIL

OPTICAL PICK-UP

FP101

SL-SV550(GK) CIRCUIT DIAGRAM

:POSITIVE VOLTAGE LINE :CD PLAYBACK SIGNAL LINE :FM SIGNAL LINE :MAIN(CD,FM) SIGNAL LINE

IC502
C3ABMB000027
16M DRAM

IC501
MN6627911AC1
SERVO PROCESSOR /
DIGITAL SIGNAL PROCESSOR /
DIGITAL FILTER & D/A CONVERTER

IC11
AN41506A-VB
POWER SUPPLY/
MOTOR DRIVE

IC13
C0CBAAB00039
REGULATOR

IC701
C1BB00000786
HEADPHONE AMP

Q731
2SC3931CTX
SWITCHING

Q18
UN5113TX
RESET

Q19,301
UN5210TX
RESET

Q701
B1ADMB000003
POWER SUPPLY

Q703
XP1210TX
VOICE GAIN-UP

Q902
XP1210TX
MUTING CONT.

QY903
UN5113TX
SWITCHING(BEEP)

QY904
UN5213TX
SWITCHING
(BEEP)

D701
MA111TX

X501
(16.9344MHz)

CD +B LINE

PLAY
20mV P-P
0.5 μs. 20mV/DIV.